



# **STIC Search Report**

## **Biotech-Chem Library**

**STIC Database Tracking Number: 166392**

**TO: Kevin Weddington**  
**Location: rem/3A65/3C70**  
**Art Unit: 1614**  
**Wednesday, October 05, 2005**

**Case Serial Number: 10/802425**

**From: Mary Jane Ruhl**  
**Location: Biotech-Chem Library**  
**Remsen 1-A-62**  
**Phone: 571-272-2524**

**maryjane.ruhl@uspto.gov**

### **Search Notes**

Examiner Weddington,

Here are the results for your recent search request.

Please feel free to contact me if you have any questions about these results.

Thank you for using STIC services. We appreciate the opportunity to serve you.

Sincerely,

Mary Jane Ruhl  
Technical Information Specialist  
STIC  
Remsen 1-A-62  
Ext. 22524



# STIC SEARCH RESULTS FEEDBACK FORM

## Biotech-Chem Library

Questions about the scope or the results of the search? Contact **the searcher or contact:**

Mary Hale, Information Branch Supervisor  
Remsen Bldg. 01 D86  
571-272-2507

## Voluntary Results Feedback Form

➤ I am an examiner in Workgroup:  Example: 1610

➤ Relevant prior art **found**, search results used as follows:

- ☐ 102 rejection
- ☐ 103 rejection
- ☐ Cited as being of interest.
- ☐ Helped examiner better understand the invention.
- ☐ Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- ☐ Foreign Patent(s)
- ☐ Non-Patent Literature  
(journal articles, conference proceedings, new product announcements etc.)

➤ Relevant prior art **not found**:

- ☐ Results verified the lack of relevant prior art (helped determine patentability).
- ☐ Results were not useful in determining patentability or understanding the invention.

Comments:

Drop off or send completed forms to STIC-Biotech-Chem Library Remsen Bldg.



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Scientific and Technical Information Center

# SEARCH REQUEST FORM

Requester's Full Name: K. Weddington Examiner #: 68082 Date: 9-20-05  
Art Unit: 1614 Phone Number: 2-0587 Serial Number: 101 802,425  
Location (Bldg/Room#): 3A65 (Mailbox #): \_\_\_\_\_ Results Format Preferred (circle): PAPER DISK  
\*\*\*\*\*

To ensure an efficient and quality search, please attach a copy of the cover sheet, claims, and abstract or fill out the following:

Title of Invention: \_\_\_\_\_

Inventors (please provide full names): Bonnie L. Bassler; Carol Damme; Stephen Schauder;  
Jeffrey Stein; Michael G. Surette

Earliest Priority Date: \_\_\_\_\_

## Search Topic:

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, and relationships.

RECEIVED  
SEP 20 2005  
CALIFORNIA DIVISION  
OF THE FBI

## WHAT IS CLAIMED IS:

1. A method for identifying a compound that regulates the activity of autoinducer-2 comprising:

- (a) contacting autoinducer-2 with the compound;
- (b) measuring the activity of autoinducer-2 in the presence of the compound and comparing the activity of autoinducer-2 obtained in the presence of the compound to the activity of autoinducer-2 obtained in the absence of the compound;
- and
- (c) identifying a compound that regulates the activity of autoinducer-2.

2. The method of claim 1, wherein the autoinducer-2 is 4-hydroxy-5-methyl-2H-furan-3-one.

3. The method of claim 1, wherein the contacting is *in vivo*.

4. The method of claim 1, wherein the contacting is *in vitro*.

5. The method of claim 1, wherein the regulation is by increasing the activity of autoinducer-2.

6. The method of claim 1, wherein the regulation is by decreasing the activity of autoinducer-2.

7. The method of claim 1, wherein the compound is a polypeptide.

8. The method of claim 1, wherein the compound is a small molecule.

9. The method of claim 1, wherein the compound is a nucleic acid.

Searcher: \_\_\_\_\_ STN \_\_\_\_\_ Dialog \_\_\_\_\_  
Searcher Phone #: \_\_\_\_\_ AA Sequence (#) \_\_\_\_\_ Questel/Orbit \_\_\_\_\_ Lexis/Nexis  
Searcher Location: \_\_\_\_\_ Structure (#) \_\_\_\_\_ Westlaw \_\_\_\_\_ WWW/Internet  
Date Searcher Picked Up: \_\_\_\_\_ Bibliographic \_\_\_\_\_ In-house sequence systems  
Date Completed: \_\_\_\_\_ Litigation \_\_\_\_\_ Commercial \_\_\_\_\_ Oligomer \_\_\_\_\_ Score/Length  
Interference \_\_\_\_\_ SPDI \_\_\_\_\_ Encode/Transl  
Searcher Prep & Review Time: \_\_\_\_\_ Fulltext \_\_\_\_\_ Other (specify) \_\_\_\_\_  
Online Time: \_\_\_\_\_ Other \_\_\_\_\_

=> d his ful

(FILE 'HOME' ENTERED AT 17:13:11 ON 04 OCT 2005)

FILE 'HCAPLUS' ENTERED AT 17:13:57 ON 04 OCT 2005

L1 1 SEA ABB=ON 2001:833256/AN  
SELECT RN L1 1-1

FILE 'REGISTRY' ENTERED AT 17:14:29 ON 04 OCT 2005

L2 54 SEA ABB=ON (127-69-5/BI OR 13436-46-9/BI OR 15912-98-8/BI OR  
18766-96-6/BI OR 18871-14-2/BI OR 19322-27-1/BI OR 200010-29-3/  
BI OR 200010-31-7/BI OR 204514-85-2/BI OR 25564-22-1/BI OR  
26494-13-3/BI OR 273912-12-2/BI OR 273912-13-3/BI OR 273912-14-  
4/BI OR 273912-15-5/BI OR 273912-16-6/BI OR 273912-17-7/BI OR  
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4077-47-8/BI OR 488-10-8/BI OR 488-86-8/BI OR 50-99-7/BI OR  
50632-57-0/BI OR 527-50-4/BI OR 54458-61-6/BI OR 5694-72-4/BI  
OR 59995-48-1/BI OR 60047-17-8/BI OR 68043-00-5/BI OR 69-53-4/B  
I OR 80436-90-4/BI OR 85721-33-1/BI OR 95962-14-4/BI OR  
979-92-0/BI)

FILE 'HCAPLUS' ENTERED AT 17:14:37 ON 04 OCT 2005

L3 1 SEA ABB=ON L1 AND L2

FILE 'REGISTRY' ENTERED AT 17:23:16 ON 04 OCT 2005

L4 1 SEA ABB=ON 19322-27-1/RN  
E NUCLEIC ACID/CN  
E NUCLEIC ACID/RN  
E NUCLEIC ACID/RN

FILE 'REGISTRY' ENTERED AT 17:24:05 ON 04 OCT 2005

L5 E NUCLEIC ACID/RN  
1 SEA ABB=ON NUCLEIC ACIDS/CN

FILE 'HCAPLUS' ENTERED AT 17:25:30 ON 04 OCT 2005

L6 207491 SEA ABB=ON L2 OR ?AUTOINDUCER?(W)2  
L7 5704 SEA ABB=ON L6 AND (?POLYPEPTID? OR ?SMALL?(W)?MOLECUL? OR L5  
OR ?NUCLEIC?(W)?ACID?)  
L8 29 SEA ABB=ON L7 AND (?ACTIVITY?(W)?INCREAS? OR ?DECREAS?)  
L9 904 SEA ABB=ON L7 AND (?PATHOGEN? OR ?BACT?)

FILE 'REGISTRY' ENTERED AT 17:41:20 ON 04 OCT 2005

E BACTERIA/CN

FILE 'HCAPLUS' ENTERED AT 17:41:20 ON 04 OCT 2005

E BACTERIA+ALL

FILE 'REGISTRY' ENTERED AT 17:41:39 ON 04 OCT 2005

E BACTERIA/CN

FILE 'HCAPLUS' ENTERED AT 17:41:39 ON 04 OCT 2005

L10 70 SEA ABB=ON L7 AND ?CONTACT?  
L11 99 SEA ABB=ON L8 OR L10  
L12 27 SEA ABB=ON L11 AND (?PATH? OR ?BACT?)

*27 cit's from CAPLUS*

FILE 'MEDLINE, BIOSIS, EMBASE, JAPIO, JICST-EPLUS' ENTERED AT 17:46:26 ON  
04 OCT 2005

L13 16 SEA ABB=ON L12

L14 16 DUP REMOV L13 (0 DUPLICATES REMOVED)

*16 cits from above  
databases*

FILE 'USPATFULL' ENTERED AT 17:48:14 ON 04 OCT 2005

L15 1965 SEA ABB=ON L11 AND (?PATH? OR ?BACT?)

L16 1485 SEA ABB=ON L15 AND ?NUCLEIC?(W)?ACID?

L17 0 SEA ABB=ON L16 AND IN(W) (?VIVO? OR ?VITRO?)

L18 1311 SEA ABB=ON L16 AND (?VIVO? OR ?VITRO?)

L19 \* 1303 SEA ABB=ON L18 AND (?CONTROL? OR ?REGULAT?)

FILE 'USPATFULL' ENTERED AT 17:54:43 ON 04 OCT 2005

SAY L19 WED425L19/A

*\* Saved, should you want me to modify it for more results for you  
to see.*

FILE HOME

FILE HCAPLUS

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FILE COVERS 1907 - 4 Oct 2005 VOL 143 ISS 15

FILE LAST UPDATED: 3 Oct 2005 (20051003/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE REGISTRY

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 3 OCT 2005 HIGHEST RN 864406-23-5

DICTIONARY FILE UPDATES: 3 OCT 2005 HIGHEST RN 864406-23-5

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

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\* The CA roles and document type information have been removed from \*  
\* the IDE default display format and the ED field has been added, \*  
\* effective March 20, 2005. A new display format, IDERL, is now \*  
\* available and contains the CA role and document type information. \*  
\*

\*\*\*\*\*

Structure search iteration limits have been increased. See HELP SLIMITS for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

#### FILE MEDLINE

FILE LAST UPDATED: 4 OCT 2005 (20051004/UP). FILE COVERS 1950 TO DATE.

On December 19, 2004, the 2005 MeSH terms were loaded.

The MEDLINE reload for 2005 is now available. For details enter HELP RLOAD at an arrow prompt (=>). See also:

<http://www.nlm.nih.gov/mesh/>

[http://www.nlm.nih.gov/pubs/techbull/nd04/nd04\\_mesh.html](http://www.nlm.nih.gov/pubs/techbull/nd04/nd04_mesh.html)

OLDMEDLINE now back to 1950.

MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the MeSH 2005 vocabulary.

This file contains CAS Registry Numbers for easy and accurate substance identification.

#### FILE BIOSIS

FILE COVERS 1969 TO DATE.

CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 28 September 2005 (20050928/ED)

FILE RELOADED: 19 October 2003.

#### FILE EMBASE

FILE COVERS 1974 TO 29 Sep 2005 (20050929/ED)

EMBASE has been reloaded. Enter HELP RLOAD for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

#### FILE JAPIO

FILE LAST UPDATED: 5 SEP 2005 <20050905/UP>

FILE COVERS APR 1973 TO APRIL 28, 2005

<<< GRAPHIC IMAGES AVAILABLE >>>

#### FILE JICST-EPLUS

FILE COVERS 1985 TO 3 OCT 2005 (20051003/ED)

THE JICST-EPLUS FILE HAS BEEN RELOADED TO REFLECT THE 1999 CONTROLLED TERM (/CT) THESAURUS RELOAD.

#### FILE USPATFULL

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 4 Oct 2005 (20051004/PD)

FILE LAST UPDATED: 4 Oct 2005 (20051004/ED)

HIGHEST GRANTED PATENT NUMBER: US6952836

HIGHEST APPLICATION PUBLICATION NUMBER: US2005217002  
CA INDEXING IS CURRENT THROUGH 4 Oct 2005 (20051004/UPCA)  
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 4 Oct 2005 (20051004/PD)  
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Aug 2005  
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Aug 2005

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>>> USPAT2 is now available.  USPATFULL contains full text of the      <<<
>>> original, i.e., the earliest published granted patents or         <<<
>>> applications.  USPAT2 contains full text of the latest US         <<<
>>> publications, starting in 2001, for the inventions covered in      <<<
>>> USPATFULL.  A USPATFULL record contains not only the original     <<<
>>> published document but also a list of any subsequent              <<<
>>> publications.  The publication number, patent kind code, and      <<<
>>> publication date for all the US publications for an invention     <<<
>>> are displayed in the PI (Patent Information) field of USPATFULL   <<<
>>> records and may be searched in standard search fields, e.g., /PN, <<<
>>> /PK, etc.                                                         <<<

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>>> through the new cluster USPATALL.  Type FILE USPATALL to          <<<
>>> enter this cluster.                                               <<<
>>>                                                                    <<<
>>> Use USPATALL when searching terms such as patent assignees,       <<<
>>> classifications, or claims, that may potentially change from     <<<
>>> the earliest to the latest publication.                           <<<
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This file contains CAS Registry Numbers for easy and accurate  
substance identification.

=&gt; d que stat 112

L2 54 SEA FILE=REGISTRY ABB=ON (127-69-5/BI OR 13436-46-9/BI OR 15912-98-8/BI OR 18766-96-6/BI OR 18871-14-2/BI OR 19322-27-1/BI OR 200010-29-3/BI OR 200010-31-7/BI OR 204514-85-2/BI OR 25564-22-1/BI OR 26494-13-3/BI OR 273912-12-2/BI OR 273912-13-3/BI OR 273912-14-4/BI OR 273912-15-5/BI OR 273912-16-6/BI OR 273912-17-7/BI OR 273912-18-8/BI OR 273912-19-9/BI OR 27538-10-9/BI OR 27538-11-0/BI OR 2758-18-1/BI OR 29119-49-1/BI OR 33673-62-0/BI OR 35205-76-6/BI OR 3658-77-3/BI OR 373380-18-8/BI OR 373380-19-9/BI OR 373380-20-2/BI OR 373380-21-3/BI OR 373380-22-4/BI OR 373380-23-5/BI OR 374557-49-0/BI OR 374579-09-6/BI OR 374579-10-9/BI OR 374579-11-0/BI OR 374579-12-1/BI OR 374579-13-2/BI OR 4077-47-8/BI OR 488-10-8/BI OR 488-86-8/BI OR 50-99-7/BI OR 50632-57-0/BI OR 527-50-4/BI OR 54458-61-6/BI OR 5694-72-4/BI OR 59995-48-1/BI OR 60047-17-8/BI OR 68043-00-5/BI OR 69-53-4/BI OR 80436-90-4/BI OR 85721-33-1/BI OR 95962-14-4/BI OR 979-92-0/BI)

L5 1 SEA FILE=REGISTRY ABB=ON NUCLEIC ACIDS/CN

L6 207491 SEA FILE=HCAPLUS ABB=ON L2 OR ?AUTOINDUCER?(W)2

L7 5704 SEA FILE=HCAPLUS ABB=ON L6 AND (?POLYPEPTID? OR ?SMALL?(W)?MOL ECUL? OR L5 OR ?NUCLEIC?(W)?ACID?)

L8 29 SEA FILE=HCAPLUS ABB=ON L7 AND (?ACTIVITY?)(W)(?INCREAS? OR ?DECREAS?)

L10 70 SEA FILE=HCAPLUS ABB=ON L7 AND ?CONTACT?

L11 99 SEA FILE=HCAPLUS ABB=ON L8 OR L10

L12 27 SEA FILE=HCAPLUS ABB=ON L11 AND (?PATH? OR ?BACT?)

=&gt; d ibib abs 112 1-27

L12 ANSWER 1 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2005:34518 HCAPLUS

DOCUMENT NUMBER: 142:127541

TITLE: Screening assay for glucokinase modulators for the treatment of diabetes based on glucokinase translocation, conformational transitions or nitrosylation state in insulin-responsive cells

INVENTOR(S): Rizzo, Mark A.; Piston, David W.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 25 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005009129	A1	20050113	US 2004-838167	20040503
PRIORITY APPLN. INFO.:			US 2003-467885P	P 20030505

AB The present invention relates to providing novel therapeutics for treating diabetes other glycemic disorders. Such therapeutics involve the signaling **pathways** that contribute to regulation of glucose-stimulated insulin secretion. The role of NO synthase and of S-nitrosylation in regulating glucokinase (GK) was studied. It was shown that regulation of GK-NOS association by nitrosylation provides a sensitive means for modulating GK activity, thus affecting glucose-stimulated insulin secretion. Of particular interest are modulators of a key component in the GK **pathway**. Thus, the present provides methods of screening for modulators of glucokinase (GK) activity, expression, translocation, conformation, nitrosylation and interaction with other



mols. as useful target for pharmacol. manipulation in the treatment of diabetes and other glycemic disorders. The method comprises: (a) providing an insulin-responsive cell expressing GK; (b) **contacting** the cell with the candidate substance; (c) measuring translocation of GK into cytoplasm of the cell or the change in GK conformation or the change in GK nitrosylation. An insulinoma cell is used as the insulin-responsive cell. The insulin-responsive cell is treated with insulin, glucose, or NO. GK is labeled by yellow fluorescent protein and/or cyan fluorescent protein. Fluorescence photobleaching or FRET is used for measuring GK response.

L12 ANSWER 2 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:965288 HCAPLUS

DOCUMENT NUMBER: 141:406300

TITLE: Combined use of keratinocyte growth factor agonists and gastrin compounds in treating diabetes and other diseases

INVENTOR(S): Brand, Stephen J.; Cruz, Antonio

PATENT ASSIGNEE(S): Waratah Pharmaceuticals, Inc., Can.

SOURCE: PCT Int. Appl., 58 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004096853	A1	20041111	WO 2004-CA648	20040430
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			

PRIORITY APPLN. INFO.: US 2003-509068P P 20030430

AB The invention relates generally to compns., conjugates, and methods comprising a KGF agonist and a gastrin compound. The compns. can be used in the treatment and/or prevention of conditions for which either a KGF agonist or a gastrin compound have been demonstrated to have a therapeutic effect, including but not limited to diabetes, hypertension, chronic heart failure, fluid retentive states, metabolic syndrome and related diseases and disorders, and obesity. The invention also provides for expanding the insulin secreting cells by treatment with a KGF agonist and a gastrin compound. A method for inducing islet neogenesis therapy in a cell of an animal, comprising **contacting** the cell with a **nucleic acid** sequence encoding a gastrin/CCK receptor ligand operably linked to an insulin promoter receptor ligand and a **nucleic acid** sequence encoding a KGF receptor ligand operably linked to a metallothionein promoter was also claimed. Transgenic animals whose germ cells comprise the above mentioned **nucleic acids** is addnl. claimed.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 3 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN  
ACCESSION NUMBER: 2004:633452 HCAPLUS  
DOCUMENT NUMBER: 141:151032  
TITLE: Methods and compositions using zinc, nucleotides, and other **small molecule** ligands for P2X receptor calcium entry channels and other calcium entry mechanisms, and therapeutic use  
INVENTOR(S): Schwiebert, Erik; Zsembery, Akos  
PATENT ASSIGNEE(S): UAB Research Foundation, USA  
SOURCE: PCT Int. Appl., 113 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004064742	A2	20040805	WO 2004-US1298	20040120
WO 2004064742	C2	20050120		
WO 2004064742	A3	20050331		

W: AE, AE, AG, AL, AL, AM, AM, AM, AT, AT, AU, AZ, AZ, BA, BB, BG, BG, BR, BR, BW, BY, BY, BZ, BZ, CA, CH, CN, CN, CO, CO, CR, CR, CU, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EC, EE, EE, EG, ES, ES, FI, FI, GB, GD, GE, GE, GH, GM, HR, HR, HU, HU, ID, IL, IN, IS, JP, JP, KE, KE, KG, KG, KP, KP, KR, KR, KZ, KZ, KZ, LC, LK, LR, LS, LS, LT, LU, LV, MA, MD, MD, MG, MK, MN, MW, MX, MX, MZ, MZ, NA, NI

PRIORITY APPLN. INFO.: US 2003-441045P P 20030117  
US 2003-476423P P 20030603

AB The invention discloses a method for increasing cytosolic Ca<sup>2+</sup> levels in mammalian cells, comprising **contacting** P2X receptor Ca<sup>2+</sup> entry channels or any and all other Ca<sup>2+</sup> entry channels or mechanisms on the cell with an effective amount of a **small mol.** The invention also discloses a composition comprising the **small mol.** in a delivery system. The invention has broad applicability in the pharmaceutical industry as a method of treating airway diseases (such as cystic fibrosis and asthma), ailments of the lung and airways (such as those caused by common cold **pathogens** or allergens in allergy), kidney diseases and renal hypertensive disorders (such as polycystic kidney disease and salt-sensitive hypertension syndromes), and endocrine disorders (such as diabetes).

L12 ANSWER 4 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN  
ACCESSION NUMBER: 2004:492239 HCAPLUS  
DOCUMENT NUMBER: 141:3846  
TITLE: Method for the selection of cells that produce specific binding molecules  
INVENTOR(S): Sellrie, Frank; Micheel, Burkhard  
PATENT ASSIGNEE(S): Universitaet Potsdam, Germany  
SOURCE: Ger. Offen., 10 pp.  
CODEN: GWXXBX  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10256042	A1	20040617	DE 2002-10256042	20021130

WO 2004050901 A2 20040617 WO 2003-EP12863 20031117  
 WO 2004050901 A3 20040812  
 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,  
 CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
 GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,  
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,  
 PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,  
 TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,  
 BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,  
 ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,  
 TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  
 EP 1565567 A2 20050824 EP 2003-779963 20031117  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

PRIORITY APPLN. INFO.: DE 2002-10256042 A 20021130  
 WO 2003-EP12863 W 20031117

AB The present invention concerns a method for the selection of cells that express specific binding mols. by **contacting** the cells with a conjugate composed of an effector mol. and a specific ligand; followed the addition of a substance that binds to the ligand and thus inactivates the effector mol. The procedure can be applied to all cells, which are able to express specific binding mols. as for example **bacteria** cells, yeast cells, fungus cells, insect cells, alga cells, plant cells and mammalian cells and in particular hybridoma cells and stem cells, such as non-human embryonic stem cells. The procedure permits also a simple selection, whereby cells are available in form of an organ and/or tissue. Addnl. the selection can be accomplished in vitro or in vivo. As to be expressed mols. **nucleic acids**, polysaccharides, proteins or peptides and in particular antibodies and antibody fragments can be selected. Thus the toxic effect of an ampicillin-fluorescein conjugate on Escherichia coli was tested. The pos. control showed toxicity, i.e. the binding of the ampicillin-fluorescein conjugate to the cells via the ampicillin aminogroup; addition of an anti-fluorescein antibody resulted in the survival of E.coli, i.e. the disappearance of the toxic effect.

L12 ANSWER 5 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:269001 HCAPLUS

DOCUMENT NUMBER: 139:130861

TITLE: Investigations on the metabolism of viable and nonviable gilthead sea bream (Sparus aurata) eggs

AUTHOR(S): Lahnsteiner, Franz; Patarnello, Pierpaolo

CORPORATE SOURCE: Institute for Zoology, University of Salzburg, Salzburg, A-5020, Austria

SOURCE: Aquaculture (2003), 223(1-4), 159-174

CODEN: AQCLAL; ISSN: 0044-8486

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The present study investigated selected biochem. parameters in viable and nonviable eggs of the gilthead sea bream, Sparus aurata. During embryogenesis, S. aurata eggs had a balanced and stable energy metabolism as the levels of adenosine nucleotides and acetyl-CoA, and the adenylate energy charge (EC), remained constant Mg<sup>2+</sup>-dependent ATPase, which is involved in membrane-driven ion transport during oxidative phosphorylation, increased in activity. In nonviable eggs, the levels of ATP, acetyl-CoA, the adenylate energy charge, and the activities of malate dehydrogenase were significantly decreased in comparison to viable eggs. Viable eggs had high Na<sup>+</sup>/K<sup>+</sup>-ATPase activity which remained constant during

embryogenesis while  $\text{Ca}^{2+}$ -ATPase **activity increased**.

These enzymes were similarly high in nonviable eggs indicating that the ability for ion transport and for osmoregulation did not differ. However, nonviable eggs contained nonphysiol. high levels of magnesium and calcium ions indicating ion influx from the seawater. As the phospholipid levels were significantly lower in nonviable eggs, this ion influx is thought to be related to changed composition of the oolemma. Activities of glucose-6-phosphate dehydrogenase, transaldolase, phosphofructokinase, and pyruvate kinase were constant in viable eggs of *S. aurata* during embryogenesis. Pyruvate carboxylase increased in activity in the embryonic stage. The occurrence of these enzymes indicated the presence of the enzymic system for glycolysis for gluconeogenesis and for the pentose phosphate **pathway**. The monosaccharide levels (i.e., total amount, glucose, fructose, galactose) increased steadily during egg development. Monosaccharides are necessary for **nucleic acid** synthesis levels, which increased during embryogenesis, and may also play a role as osmotically active compds. In nonviable eggs, levels of all assayed sugars as well as activities of pyruvate carboxylase and transaldolase were very significantly decreased. Enzymes involved in the catabolism of proteins and amino acids (proteases, aspartate aminotransferase, glutamate dehydrogenase) were constant in the viable eggs with the exception of aspartate aminotransferase, which increased significantly in the embryonic stage. Nonviable eggs had lower activities of glutamate dehydrogenase than viable eggs, while the other enzyme activities were similar. Amino acid levels and inorg. phosphate levels were lower in nonviable than in viable eggs.

REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 6 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:129326 HCAPLUS

DOCUMENT NUMBER: 138:142523

TITLE: Composition and method for treatment of otitis externa

INVENTOR(S): Mautone, Alan J.

PATENT ASSIGNEE(S): Scientific Development and Research, Inc., USA

SOURCE: U.S., 13 pp., Cont.-in-part of U.S. 6,156,294.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 6

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 6521213	B1	20030218	US 2000-639730	20000816
US 6156294	A	20001205	US 1999-450884	19991128
US 2002076383	A1	20020620	US 2001-11626	20011211
PRIORITY APPLN. INFO.:			US 1999-450884	A2 19991128
			US 2000-639730	A2 20000816

AB The present invention discloses a method of increasing external auditory tube patency while simultaneously preventing the occurrence of otitis externa comprising administration of an aerosolized mixture of lipid crystals comprised of a mixture of one or more lipids surfactants and one or more spreading agents selected from the group consisting of cholesteryl esters, phospholipids, carbohydrates, and proteins, in powder form, and one or more fluorocarbon propellants directly to the external auditory tube via the external auditory meatus. Upon administration, the propellant(s) are evaporated from the mixture and the lipid crystals are deposited upon an air/liquid interface resident upon epithelial tissue lining the external auditory tube. Upon **contact** of said lipid

crystals with the epithelial lining, an amorphous spread film is formed thereupon to form a barrier against exogenous water while simultaneously and substantially decreasing the surface tension of said lining to increase the patency thereof. In a second preferred embodiment, a therapeutically active agent effective in the treatment of otitis externa is added to the mixture of lipid crystals and upon administration of said aerosol mixture, the amorphous spread film formed thereby carries said therapeutically active agent throughout the epithelium of the outer ear canal to improve the patency thereof by both reducing surface tension of said epithelial lining and by efficiently treating the inflammatory process.

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 7 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:928122 HCAPLUS

DOCUMENT NUMBER: 138:12504

TITLE: Method for assaying biomolecules and other constituents using indicator conjugates with synthetic nucleounits in lateral flow, liquid, and dry chemistry techniques

INVENTOR(S): Smith, Jack V.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 46 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 2002182600	A1	20021205	US 2001-829563	20010411
PRIORITY APPLN. INFO.:			US 2001-829563	20010411

AB The present invention is a method for the use of particles made up of nucleotides or fragments of base groups of DNA and RNA mols. herein referred to as synthetic nucleounits which can be used as recognition mols. with specificity and sensitivity significantly greater than that of antibodies which are used in clin. diagnostics, biotechnol., and research. The method for detecting an analyte using nucleounits targeted to the analyte comprises (1) identifying a nucleounit from a mixture of synthetic random sequences of nucleounit libraries, (2) conjugating the nucleounit to an indicator for the analyte, and (3) detecting the analyte using the nucleounit-indicator conjugate in a buffer. Step 1 is carried out by (a) **contacting** the analyte with the mixture of synthetic random sequences of nucleounit libraries such that some nucleounits bind the analyte, (b) removing the unbound nucleounits by partitioning, and (c) amplifying the remaining nucleounits by PCR to obtain an enriched solution of nucleounits with high affinity for the analyte. Thus, a method and lateral flow test strip for detection of cytomegalovirus (CMV) presence in a biol. sample such as serum or urine is described. The strip is prepared with three solns., one containing anti-CMV antibodies, one containing "nucleounit to CMV antibody conjugated to red microparticles" and "red microparticles", and another containing "nucleounit to colored particles". The "nucleounit" may be an oligonucleotide aptamer specific for anti-CMV antibodies.

L12 ANSWER 8 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:511028 HCAPLUS

DOCUMENT NUMBER: 138:12760  
 .TITLE: Diplostomum **spathaceum** cercariae respond to a unique profile of cues during recognition of their fish host  
 AUTHOR(S): Haas, Wilfried; Stiegeler, Petra; Keating, Anne; Kullmann, Birgit; Rabenau, Holger; Schonamsgruber, Eric; Haberl, Bernhard  
 CORPORATE SOURCE: Institute for Zoology I, University Erlangen-Nuernberg, Erlangen, D-91058, Germany  
 SOURCE: International Journal for Parasitology (2002), 32(9), 1145-1154  
 CODEN: IJPYBT; ISSN: 0020-7519  
 PUBLISHER: Elsevier Science Ltd.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB During its normal life cycle, Diplostomum **spathaceum** cercariae attach to and invade fish intermediate hosts. They are also known to attach to various other aquatic animals in response to water currents, touch and carbon dioxide. The purpose of this study was to identify the specific stimuli used by D. **spathaceum** cercariae to recognize the appropriate fish host. The authors characterized the host cues which stimulate them to remain on the host (enduring **contact**) and to penetrate the skin. Cercariae were exposed to animal skin tissues and fish skin surface mucus, their exts. and chemical modifications integrated into agar or offered via membrane filters. Enduring **contact** was stimulated by hydrophilic exts. Mr<3 kDa, which were sensitive to oxidation of carbohydrates. The stimulating cues are probably **small mol.** carbohydrates, as monosaccharides stimulated enduring **contacts**, but amino acids, urea, electrolytes and peptides did not. Penetration was stimulated by hydrophilic macromols., Mr>30 kDa, and by lipids. The hydrophilic stimuli were protease resistant and precipitable with Alcian blue and they were sensitive to alkaline cleavage, to digestion with lysozyme and neuraminidase as well as to oxidation of sialic acids. They were considered to be glycoproteins with O-glycosidically linked carbohydrate chains and bound sialic acids as signal structures. The lipophilic penetration stimuli were contained exclusively in the fatty acid fractions, and the stimulating characteristics of these fatty acids resembled the stimulating penetrations in other cercarial species. Diplostomum **spathaceum** cercariae respond to a unique profile of cues in their sequence of host-recognition phases. These cues differ from those used in other fish parasites studied to date and underline the diversity of fish recognition strategies.

REFERENCE COUNT: 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 9 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:368225 HCAPLUS  
 DOCUMENT NUMBER: 136:366147  
 TITLE: Monocotyledonous plant transformation  
 INVENTOR(S): Elliott, Adrian Ross; Lakshmanan, Prakash; Geijskes, Robert Jason; Berding, Nils; Grof, Christopher Peter Leslie; Smith, Grant Richard  
 PATENT ASSIGNEE(S): Sugar Research & Development Corporation, Australia; Bureau of Sugar Experiment Stations; Commonwealth Scientific and Industrial Research Organisation  
 SOURCE: PCT Int. Appl., 51 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002037951	A1	20020516	WO 2001-AU1454	20011109
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2454383	AA	20020516	CA 2001-2454383	20011109
AU 2002014805	A5	20020521	AU 2002-14805	20011109
EP 1349444	A1	20031008	EP 2001-983292	20011109
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
US 2004123342	A1	20040624	US 2003-437367	20030512
PRIORITY APPLN. INFO.:			AU 2000-1431	A 20001110
			WO 2001-AU1454	W 20011109

AB A method of producing a transgenic monocotyledonous plant includes culturing a thin section explant from a monocotyledonous plant, such as sugarcane, wheat or sorghum, in the presence of an auxin and, optionally, a cytokinin, prior to transformation. It is optimal for the thin section to be oriented during this pre-transformation culture period of 1-6 days so that a basal surface is substantially not in **contact** with the culture medium. The cultured explant is then transformed followed by a rest period of 4-15 days in a culture medium without selection agent but comprising an auxin and, optionally, a cytokinin. After this rest period, transgenic plants are selectively propagated from the transformed plant tissue in the presence of a selection agent such as paromomycin sulfate or geneticin. This system provides rapid, efficient generation of transgenic monocotyledonous plants from transformed, non-callus tissue and thereby reduces the likelihood of somaclonal variation among transgenic progeny.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 10 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:107671 HCAPLUS

DOCUMENT NUMBER: 136:163667

TITLE: Methods for biosensor library synthesis and applications of use

INVENTOR(S): Minshull, Jeremy; Davis, S. Christopher; Welch, Mark; Raillard, Sun Ai; Vogel, Kurt; Krebber, Claus

PATENT ASSIGNEE(S): Maxygen, Inc., USA

SOURCE: PCT Int. Appl., 158 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002010750	A2	20020207	WO 2001-US24182	20010731
WO 2002010750	A3	20030710		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,				

GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,  
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,  
 RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,  
 UZ, VN, YU, ZA, ZW  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG,  
 KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR,  
 IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN,  
 GQ, GW, ML, MR, NE, SN, TD, TG  
 US 2002102577 A1 20020801 US 2001-920452 20010731  
 US 2002127623 A1 20020912 US 2001-920607 20010731  
 EP 1373889 A2 20040102 EP 2001-957383 20010731  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

PRIORITY APPLN. INFO.: US 2000-222056P P 20000731  
 US 2000-244764P P 20001031  
 WO 2001-US24182 W 20010731

AB The invention concerns methods for sensing test stimuli using arrays of biopolymers. Reusable library arrays of biopolymers, such **nucleic acid** variants, and expression products encoded by **nucleic acid** variants are provided. The present invention provides novel methods for detecting a wide range of biol., chemical and biochem. stimuli. The methods of the invention utilize biopolymers and arrayed libraries of biopolymers, members of which are capable of binding the biol., chemical or biochem. stimuli, and upon binding produce a detectable signal. Upon **contact** with the test stimulus, a test stimulus array pattern is produced and detected. The test stimulus array pattern is then compared to the calibrating array pattern enabling identification of the test stimulus. Examples provide extensive listings of suitable hormones and enzymes suitable for such biosensor development. Diagrams describing the apparatus are given.

L12 ANSWER 11 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:66012 HCAPLUS  
 DOCUMENT NUMBER: 136:115131  
 TITLE: Matrices with memories  
 INVENTOR(S): Nova, Michael P.; Potash, Hanan  
 PATENT ASSIGNEE(S): Discovery Partners International, Inc., USA  
 SOURCE: U.S., 117 pp., Cont.-in-part of U.S. 5,961,923.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 20  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6340588	B1	20020122	US 1998-51022	19980922
US 5741462	A	19980421	US 1995-428662	19950425
US 5925562	A	19990720	US 1995-480196	19950607
US 6331273	B1	20011218	US 1995-473660	19950607
US 6352854	B1	20020305	US 1995-480147	19950607
US 6416714	B1	20020709	US 1995-484486	19950607
US 5874214	A	19990223	US 1995-538387	19951003
US 6025129	A	20000215	US 1995-567746	19951205
WO 9636436	A1	19961121	WO 1996-US6145	19960425
W:	AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI			
RW:	KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR,			



	IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN	
US 6100026	A	20000808 US 1996-633410 19960610
US 6319668	B1	20011120 US 1996-669252 19960624
US 6284459	B1	20010904 US 1996-711426 19960905
US 6017496	A	20000125 US 1996-709435 19960906
US 5961923	A	19991005 US 1996-723423 19960930

PRIORITY APPLN. INFO.:

US 1995-428662	A2	19950425
US 1995-473660	A2	19950607
US 1995-480147	A2	19950607
US 1995-480196	A2	19950607
US 1995-484486	A2	19950607
US 1995-484504	A2	19950607
US 1995-538387	A2	19951003
US 1995-567746	A2	19951205
US 1996-639813	B2	19960402
WO 1996-US6145	A2	19960425
US 1996-633410	A2	19960610
US 1996-669252	A2	19960624
US 1996-711426	A2	19960905
US 1996-709435	A2	19960906
US 1996-723423	A2	19960930
US 1995-184504	A2	19950607
US 1997-945053	B2	19971021

AB Combinations, called matrixes with memories, of matrix materials that are encoded with an optically readable code are provided. The matrix materials are those that are used in as supports in solid phase chemical and biochem. syntheses, immunoassays and hybridization reactions. The matrix materials may addnl. include fluorophores or other luminescent moieties to produce luminescing matrixes with memories. The memories include electronic and optical storage media and also include optical memories, such as bar codes and other machine-readable codes. By virtue of this combination, mols. and biol. particles, such as phage and viral particles and cells, that are in proximity or in phys. **contact** with the matrix combination can be labeled by programming the memory with identifying information and can be identified by retrieving the stored information. Combinations of matrix materials, memories, and linked mols. and biol. materials are also provided. The combinations have a multiplicity of applications, including combinatorial chemical, isolation and purification of target macromols., capture and detection of macromols. for anal. purposes, selective removal of contaminants, enzymic catalysis, cell sorting, sensors and drug delivery, chemical modification and other uses. Methods for tagging mols., biol. particles and matrix support materials, immunoassays, receptor binding assays, scintillation proximity assays, non-radioactive proximity assays, and other methods are also provided. Sensors containing a memory in combination with a matrix are also provided.

REFERENCE COUNT: 70 THERE ARE 70 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 12 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:569707 HCAPLUS

DOCUMENT NUMBER: 135:147460

TITLE: Correction of genetic defects using chemical chaperones

INVENTOR(S): Welch, William J.; Brown, C. Randell; Tatzelt, Jorg

PATENT ASSIGNEE(S): The Regents of the University of California, USA

SOURCE: U.S., 55 pp., Cont.-in-part of U.S. 5,900,360.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6270954	B1	20010807	US 1999-291406	19990413
US 5900360	A	19990504	US 1997-838691	19970409
US 2001021500	A1	20010913	US 2001-823657	20010330
US 6541195	B2	20030401		

PRIORITY APPLN. INFO.:  
US 1996-15155P P 19960410  
US 1997-838691 A2 19970409  
WO 1997-US5846 W 19970409  
US 1999-291406 A1 19990413

AB A method is disclosed for improving a phenotypic defect in a cell that contains a conformationally defective target protein, wherein the conformational defect causes the phenotype defect, which comprises **contacting** a first cell that expresses the conformationally defective target protein with an amount of a protein stabilizing agent that is effective to improve the conformational defect, thereby improving the phenotypic defect of the first cell in comparison with a second cell having the same conformationally defective target protein and phenotypic defect, wherein the second cell is not **contacted** with the protein stabilizing agent.

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 13 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2000:842023 HCAPLUS

DOCUMENT NUMBER: 134:32962

TITLE: Ophthalmic solutions incorporating an antimicrobial **polypeptide**

INVENTOR(S): Tuse, Daniel; Mortelmans, Kristien; Hokama, Leslie A.; Selsted, Michael E.; Chapoy, Lawrence L.; Quinn, Michael H.

PATENT ASSIGNEE(S): Large Scale Biology Corporation, USA; SRI International; The Regents of the University of California; Wesley-Jessen Corporation

SOURCE: PCT Int. Appl., 91 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000071175	A1	20001130	WO 2000-US14608	20000523

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 6482799 B1 20021119 US 1999-318195 19990525

PRIORITY APPLN. INFO.: US 1999-318195 A 19990525

AB This invention provides a novel antimicrobial system suitable for formulation in a wide variety of ophthalmic solns. In particular the composition comprises an antimicrobial peptide that is an indolicidin and a

buffer compatible with application to a mammalian eye, wherein the buffer is a Good's buffer or the buffer has a halide ion concentration less than 0.85 wt%. The compns. are useful for storing, cleaning, or disinfecting a **contact** lens. In particular the compns. are self-preserving upon lengthy storage, effective in cleaning and sterilizing **contact** lenses upon exposure of the lens to the composition, do not require the need for phys. or thermal treatment of the lens and enable the immediate application of the lens to the eye without the need for neutralization, deactivation or washing. For example, an indolicidin ophthalmic solution was prepared by dissolving 0.005 g of indolicidin in 10 mL distilled water, diluting the solution with a phosphate buffer to 100 mL, and adding 8.7 g of NaCl and 0.25 g of Poloxamer.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 14 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2000:842010 HCAPLUS

DOCUMENT NUMBER: 134:26048

TITLE: Construction of tagged epitope protein transposable elements and their use for **pathogen** detection and as carrier vaccines

INVENTOR(S): Heffron, Fred L.; Parker, David C.; Ellefson, Dolph D.

PATENT ASSIGNEE(S): Oregon Health Sciences University, USA

SOURCE: PCT Int. Appl., 63 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000071158	A1	20001130	WO 2000-US14687	20000526
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2374070	AA	20001130	CA 2000-2374070	20000526
AU 2000052998	A5	20001212	AU 2000-52998	20000526
EP 1194165	A1	20020410	EP 2000-937880	20000526
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2003500037	T2	20030107	JP 2000-619460	20000526
US 6846622	B1	20050125	US 2001-979338	20011121
PRIORITY APPLN. INFO.:			US 1999-136210P	P 19990526
			WO 2000-US14687	W 20000526

AB A transposable element is provided that includes a 5' recombining site 5' of a **nucleic acid** sequence encoding a selectable marker, a 3' recombining site 3' of the **nucleic acid** sequence encoding a selectable marker, a **nucleic acid** sequence encoding an MHC epitope 5' to the 5' recombining site or 3' to the 3' recombining site, and an insertion end comprising an inverted repeat sequence sufficient for integration of the transposable element at the 5' and the 3' end of the transposable element. The transposable

element includes a 5' loxP sequence 5' of a **nucleic acid** encoding a selectable marker, a 3' loxP sequences 3' of a **nucleic acid** encoding the selectable marker, an MHC epitope 5' to the 5' loxP sequences or 3' of the 3' loxP sequence, an insertion end at the 5' end of the transposable element, and an insertion end at the 3' of the transposable element. A method is provided for detecting an antigenic epitope of a **pathogen** by infecting a **pathogenic** cell with a transposable element of the invention, wherein the infection results in the integration of the transposable element in a **nucleic acid** sequence of the **bacterial** cell; transforming the **pathogenic** cell with a vector comprising a transposase; **contacting** a eukaryotic cell that can internalize the **pathogenic** cell with the **pathogenic** cell infected with the transposable element; **contacting** the eukaryotic cell with a specific binding partner that recognizes the MHC epitope; identifying the labeled eukaryotic cells and externalizing the **bacteria** cell. The externalized **bacterial** cell may be grown to produce a population of **bacterial** cells, and the **nucleic acid** sequence of the **bacterial** cell that has the integrated transposable element is identified. This **nucleic acid** sequence encodes the antigenic element of the **pathogen**. A method is also provided for generating a carrier vaccine by infecting a **bacterial** cell with the transposable element of the invention, wherein the transposable further comprises an antigen associated with a disease operably linked to the MHC epitope of the transposable element. The infection of the **bacteria** results in the integration of the transposable element in a **nucleic acid** sequence of the **bacterial** cell. The **pathogenic** cell is then internalized into a eukaryotic cell and the eukaryotic cell is exposed to a specific binding agent that recognizes the MHC epitope, identifying labeled eukaryotic cells are identified and lysed to externalize the **bacteria** cell, which is cultured to produce a population of **bacterial** cells. The **nucleic acid** sequence of the **bacterial** cell that has the integrated transposable element is identified, wherein the **nucleic acid** sequence encodes the antigenic element of the **pathogen**. The **graving bacterial** cell identified, and may be used as the carrier vaccine.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 15 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1999:359738 HCAPLUS

DOCUMENT NUMBER: 131:2507

TITLE: Improvements in or relating to displacement assays using analyte-displaceable moieties

INVENTOR(S): Badley, Robert Andrew; Berry, Mark John; Howell, Stephen

PATENT ASSIGNEE(S): Unilever PLC, UK; Unilever N.V.

SOURCE: PCT Int. Appl., 49 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
WO 9927368	A1	19990603	WO 1998-GB3483	19981123
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,				

DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE,  
 KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW,  
 MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR,  
 TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
 RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,  
 FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,  
 CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

CA 2309599 AA 19990603 CA 1998-2309599 19981123  
 AU 9912482 A1 19990615 AU 1999-12482 19981123  
 AU 757691 B2 20030306  
 EP 1032835 A1 20000906 EP 1998-955751 19981123  
 EP 1032835 B1 20050112

R: CH, DE, ES, FR, GB, IT, LI, NL, SE, IE

JP 2001524674 T2 20011204 JP 2000-522454 19981123

PRIORITY APPLN. INFO.: EP 1997-309409 A 19971121

WO 1998-GB3483 W 19981123

AB Disclosed is a method of detecting the presence of an analyte of interest in the sample, the method comprising the steps of: reversibly immobilizing on a first surface a displaceable moiety; exposing the first surface to a sample comprising the analyte of interest, the analyte of interest specifically displacing the displaceable moiety from the first surface; causing the displaceable moiety displaced from the first surface to **contact** a second surface bearing a capture moiety which specifically binds to the displaceable moiety, so as to capture the displaceable moiety on the second surface, said capture generating a detectable signal; and detecting the signal. Estradiol 3-glucuronide (ED3G) was immobilized at a first surface on a Bialite biosensor and loaded with monoclonal antibody 4155 to estrone 3-glucuronide (E3G). Rabbit anti-mouse IgG was immobilized at a second surface. Specific displacement of 4155 from surface 1 and recapture/detection at surface 2 was induced by injection of E3G across the surfaces.

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 16 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1999:136747 HCAPLUS

DOCUMENT NUMBER: 130:165143

TITLE: Remotely programmable matrixes with memories with applications to biological processes

INVENTOR(S): Nova, Michael P.; Senyei, Andrew E.

PATENT ASSIGNEE(S): IRORI, USA

SOURCE: U.S., 56 pp., Cont.-in-part of U.S. Ser. No. 480,147.  
 CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 20

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5874214	A	19990223	US 1995-538387	19951003
US 5741462	A	19980421	US 1995-428662	19950425
US 5925562	A	19990720	US 1995-480196	19950607
US 6331273	B1	20011218	US 1995-473660	19950607
US 6352854	B1	20020305	US 1995-480147	19950607
US 6416714	B1	20020709	US 1995-484486	19950607
US 6025129	A	20000215	US 1995-567746	19951205
CA 2216645	AA	19961121	CA 1996-2216645	19960425
WO 9636436	A1	19961121	WO 1996-US6145	19960425

W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE,

ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT,  
 LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE,  
 SG, SI  
 RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR,  
 IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN  
 EP 822861 A1 19980211 EP 1996-916437 19960425  
 EP 822861 B1 20031126  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI  
 CN 1181720 A 19980513 CN 1996-193374 19960425  
 JP 11511238 T2 19990928 JP 1996-530562 19960425  
 AT 254965 E 20031215 AT 1996-916437 19960425  
 AU 9659185 A1 19961129 AU 1996-59185 19960501  
 AU 707444 B2 19990708  
 US 6100026 A 20000808 US 1996-633410 19960610  
 US 6319668 B1 20011120 US 1996-669252 19960624  
 US 6284459 B1 20010904 US 1996-711426 19960905  
 US 6017496 A 20000125 US 1996-709435 19960906  
 US 5961923 A 19991005 US 1996-723423 19960930  
 WO 9712680 A2 19970410 WO 1996-US15999 19961003  
 WO 9712680 A3 19970821  
 W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,  
 DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC,  
 LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT,  
 RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN,  
 AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
 RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR,  
 IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG  
 AU 9672573 A1 19970428 AU 1996-72573 19961003  
 EP 853497 A2 19980722 EP 1996-934064 19961003  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, FI  
 US 6329139 B1 20011211 US 1997-912998 19970811  
 US 6340588 B1 20020122 US 1998-51022 19980922  
 PRIORITY APPLN. INFO.:  
 US 1995-428662 A2 19950425  
 US 1995-473660 A 19950607  
 US 1995-480147 A2 19950607  
 US 1995-480196 A 19950607  
 US 1995-484486 A 19950607  
 US 1995-484504 A2 19950607  
 US 1995-184504 A2 19950607  
 US 1995-538387 A2 19951003  
 US 1995-567746 A 19951205  
 US 1996-639813 A 19960402  
 WO 1996-US6145 W 19960425  
 US 1996-633410 A2 19960610  
 US 1996-669252 A2 19960624  
 US 1996-711426 A2 19960905  
 US 1996-709435 A2 19960906  
 US 1996-723423 A 19960930  
 WO 1996-US15999 W 19961003  
 US 1996-726703 B2 19961007  
 US 1996-743984 A2 19961028  
 US 1996-741685 B2 19961031  
 US 1997-857800 B2 19970122  
 US 1997-826253 B2 19970327  
 US 1997-945053 B2 19971021

AB Combinations, called matrixes with memories, of matrix materials with  
 remotely addressable or remotely programmable recording devices that  
 contain at least one data storage unit are provided. The matrix materials

are those that are used in as supports in solid phase chemical and biochem. syntheses, immunoassays and hybridization reactions. The data storage units are non-volatile antifuse memories or volatile memories, such as EEPROMS, DRAMS or flash memory. By virtue of this combination, mols. and biol. particles, such as phage and viral particles and cells, that are in proximity or in phys. **contact** with the matrix combination can be labeled by programming the memory with identifying information and can be identified by retrieving the stored information. Combinations of matrix materials, memories, and linked mols. and biol. materials are also provided. The combinations have a multiplicity of applications, including combinatorial chemical, isolation and purification of target macromols.,

capture

and detection of macromols. for anal. purposes, selective removal of contaminants, enzymic catalysis, cell sorting, drug delivery, chemical modification and other uses. Methods for electronically tagging mols., biol. particles and matrix support materials, immunoassays, receptor binding assays, and other methods are also provided.

REFERENCE COUNT: 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 17 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1998:115343 HCAPLUS

DOCUMENT NUMBER: 128:150368

TITLE: Rapid and sensitive detection of antibiotic-resistant **mycobacteria** using oligonucleotide probes specific for ribosomal RNA precursors

INVENTOR(S): Britschgi, Theresa B.; Cangelosi, Gerard A.

PATENT ASSIGNEE(S): Becton Dickinson and Co., USA

SOURCE: U.S., 54 pp., Cont.-in-part of U.S. Ser. No. 261,068, abandoned.

CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5712095	A	19980127	US 1995-485602	19950607
US 5770373	A	19980623	US 1996-745638	19961108
US 5726021	A	19980310	US 1996-757180	19961127
PRIORITY APPLN. INFO.:			US 1994-261068	B2 19940616
			US 1995-485602	A3 19950607

AB Methods and oligonucleotide probe compns. useful for determining antibiotic resistance in **mycobacteria** are provided. The probes hybridize to open regions of **mycobacterial** pre-rRNA that are not present in the mature rRNA mol., and function advantageously well in hybridization assays where the target RNA is not denatured just prior to hybridization. Species-specific probes are available for **Mycobacterium tuberculosis**, **M. leprae**, **M. habana**, **M. avium**, **M. bovis**, **M. lufu**, **M. paratuberculosis**, **M. marinum**, **M. simiae**, and **M. intracellulare**. Methods are also provided for lysing the **mycobacterial** cells so as to free intact precursor rRNA from **mycobacterial** cells without degradation. The cells are treated by enzymic degrdn using both lysozyme and a protease to make the cell walls porous, followed by **contact** with a combination of a magnesium chelator, a nonionic detergent, an anionic detergent, and heating at 75-99°. The pre-rRNA and oligonucleotide probes are useful for detecting pre-rRNA, determining antibiotic resistance (e.g., rifampin), and screening for new anti-**mycobacterial** therapeutic agents. These methods combine the comprehensive sensitivity

of phenotypic tests for antibiotic susceptibility with the speed and species specificity of oligonucleotide probe methods.

REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 18 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1997:281150 HCAPLUS

DOCUMENT NUMBER: 126:260137

TITLE: Targeting of proteins to the cell wall of gram-positive **bacteria**

INVENTOR(S): Schneewind, Olaf; Baba, Tadashi

PATENT ASSIGNEE(S): Regents of the University of California, USA

SOURCE: PCT Int. Appl., 123 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9708553	A1	19970306	WO 1996-US14154	19960822
W: AU, BR, CA, IL, JP				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9669133	A1	19970319	AU 1996-69133	19960822
PRIORITY APPLN. INFO.:			US 1995-2615P	P 19950822
			WO 1996-US14154	W 19960822

OTHER SOURCE(S): MARPAT 126:260137

AB A method of stable noncovalent display of proteins, peptides, or compds. covalently linked to proteins or peptides on the surface of gram-pos. **bacteria** provides advantages over phage display. One embodiment of the present invention comprises a method for noncovalent protein targeting, comprising the steps of: (1) cloning a **nucleic acid** segment encoding a chimeric protein into a gram-pos. **bacterium** to generate a cloned chimeric protein including therein a carboxyl-terminal cell-wall targeting signal; (2) growing the **bacterium** into which the **nucleic acid** segment has been cloned to express the chimeric protein to generate a chimeric protein including therein a carboxyl-terminal cell-wall targeting signal; and (3) binding the expressed chimeric protein noncovalently and stably to the cell-wall via the carboxyl-terminal cell-wall targeting signal so that the chimeric protein is displayed on the surface on the gram-pos. **bacterium** in such a way that the protein is accessible to a ligand. Alternatively, the chimeric protein can be produced by expression in another expression system and **contacted** with the gram-pos. **bacterium**. Described are methods for producing vaccines as well as for using antibiotic-protein conjugates to treat infections.

L12 ANSWER 19 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1996:196789 HCAPLUS

DOCUMENT NUMBER: 124:220476

TITLE: Depth of the essential characteristics of the signal transmission process starting from the cell surface, and their medicinal applications in atherosclerosis, diabetes, cancer, scurvy, rickets, and other conditions

INVENTOR(S): Zagjansky, Yuly

PATENT ASSIGNEE(S): Fr.

SOURCE: Can. Pat. Appl., 320 pp.

CODEN: CPXXEB



DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CA 2139676	AA	19951225	CA 1994-2139676	19941025
PRIORITY APPLN. INFO.:			US 1994-281731	A 19940624

AB From a general process of activity of cell-surface receptors, the principal dogmas of life sciences are revised and clearly reestablished. As a result, more universal new processes and structures are established, e.g. protein kinase C vesicles, the Ca-K(Ca) wave, propagation of cell signals to DNA, etc. Consequently, the process of creation of basal lamina and organs; the structure of **contact** inhibition; cardiac, skeletal, and smooth muscle action; cell motility; attachment and penetration of **bacterial** and viral toxins; etc. have also been clearly established. Mol. origins of, and preps. against, a variety of disorders (diabetes, dystrophy, scurvy, rickets, etc.) are included. Creation of twins is described. The finished accordance from all the given principles and very different domains again confirms the incontestable validity of findings advanced over a half-century. Included are 44 schematic diagrams and 1514 refs.

L12 ANSWER 20 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1995:880373 HCAPLUS  
 DOCUMENT NUMBER: 123:281741  
 TITLE: Adenovirus-mediated overexpression of liver 6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase in gluconeogenic rat hepatoma cells. Paradoxical effect on Fru-2,6-P2 levels  
 AUTHOR(S): Argaud, Doriane; Lange, Alex J.; Becker, Thomas C.; Okar, David A.; El-Maghrabi, M. Raafat; Newgard, Christopher B.; Pilkis, Simon J.  
 CORPORATE SOURCE: Dep. Physiology Biophysics, Health Science Center, State Univ. New York, Stony Brook, NY, 11794, USA  
 SOURCE: Journal of Biological Chemistry (1995), 270(41), 24229-36  
 CODEN: JBCHA3; ISSN: 0021-9258  
 PUBLISHER: American Society for Biochemistry and Molecular Biology  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB 6-Phosphofructo-2-kinase/fructose-2,6-bisphosphatase has been postulated to be a metabolic signaling enzyme, which acts as a switch between glycolysis and gluconeogenesis in mammalian liver by regulating the level of fructose 2,6-bisphosphate (Fru-2,6-P2). The effect of overexpressing the bifunctional enzyme was studied in FAO cells transduced with recombinant adenoviral constructs of either the wild-type enzyme or a double mutant that has no bisphosphatase activity or protein kinase phosphorylation site. With both constructs, the mRNA and protein were overexpressed by 150- and 40-fold, resp. Addition of cAMP to cells overexpressing the wild-type enzyme increased the S0.5 for fructose 6-phosphate of the kinase by 1.5-fold but had no effect on the overexpressed double mutant. When the wild-type enzyme was overexpressed, there was a decrease in fructose 2,6-bisphosphate levels, even though 6-phosphofructo-2-kinase maximal **activity increased** more than 22-fold and was in excess of fructose-2,6-bisphosphatase maximal activity. The kinase:bisphosphatase maximal activity ratio was decreased, indicating that the overexpressed enzyme was phosphorylated by

cAMP-dependent protein kinase. Overexpression of the double mutant resulted in a 28-fold increase in kinase maximal activity and a 3-4-fold increase in fructose 2,6-bisphosphate levels. Overexpression of this form inhibited the rate of glucose production from dihydroxyacetone by 90% and stimulated the rate of lactate plus pyruvate production by 200%. In contrast, overexpression of the wild-type enzyme enhanced glucose production and inhibited lactate plus pyruvate production. These results provide direct support for fructose 2,6-bisphosphate as a regulator of gluconeogenic/glycolytic **pathway** flux and suggest that regulation of bifunctional enzyme activities by covalent modification is more important than the amount of the protein.

L12 ANSWER 21 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1995:698893 HCAPLUS

DOCUMENT NUMBER: 123:74872

TITLE: Action of cell-surface receptors changing the main characteristics of cellular function, and medical applications thereof in atherosclerosis, diabetes, cancer, and other disorders

INVENTOR(S): Zagjansky, Yuly

PATENT ASSIGNEE(S): Fr.

SOURCE: Fr. Demande, 309 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2711318	A1	19950428	FR 1993-11198	19930921
PRIORITY APPLN. INFO.:			FR 1993-11198	19930921

AB From a general process of activity of cell-surface receptors, the principal dogmas of life sciences are revised and clearly reestablished. As a result, more universal new processes and structures are established, e.g. protein kinase C vesicles, the Ca-K(Ca) wave, propagation of cell signals to DNA, etc. Consequently, the process of creation of basal lamina and organs; the structure of **contact** inhibition; cardiac, skeletal, and smooth muscle action; cell motility; attachment and penetration of **bacterial** and viral toxins; etc. have also been clearly established. Mol. origins of, and preps. against, major disorders (diabetes, dystrophy, scurvy, rickets, etc.) are included. The finished accordance from all the given principles and very different domains again confirms the incontestable validity of findings advanced over a half-century. Included are 44 schematic diagrams and 1514 refs.

L12 ANSWER 22 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1994:602122 HCAPLUS

DOCUMENT NUMBER: 121:202122

TITLE: Hexose-monophosphate shunt activity in intact Plasmodium falciparum-infected erythrocytes and in free parasites

AUTHOR(S): Atamna, Hani; Pascarmona, Gianpiero; Ginsburg, Hagai  
CORPORATE SOURCE: Department of Biological Chemistry, Institute of Life Sciences, Hebrew University, Jerusalem, 91904, Israel

SOURCE: Molecular and Biochemical Parasitology (1994), 67(1), 79-89

CODEN: MBIPDP; ISSN: 0166-6851

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The hexose monophosphate shunt (HMS) produces NADPH for reductive antioxidant protection and for metabolic regulation, as well as ribose 5-phosphate needed for the synthesis of **nucleic acids**. Since malaria-infected red blood cells (RBC) are under endogenous oxidant stress, it was interesting to determine HMS activity in intact infected cells, as well as in free parasites. HMS activity was determined by measuring the evolution of  $^{14}\text{CO}_2$  from D-[1- $^{14}\text{C}$ ]glucose in normal RBC, in intact Plasmodium falciparum-infected RBC (IRBC) and in free parasites. The HMS activity of IRBC was 78 times higher than that of normal RBC. This **activity increased** with parasite maturation from the ring stage toward the trophozoite stage, and declined at the schizont stage. The HMS activity of the parasite contributes 82% of the total observed in the intact IRBC, and that of the host cell is increased some 24-fold. The increased reducing capacity of IRBC and free parasites were also evidenced by the larger ability for reductive accumulation of methylene blue. Since the endogenous oxidative stress is produced by the parasite digestion of the host cell's Hb, inhibition of this process with protease inhibitors, by alkalization of the parasite's food vacuole, or by the application of antimalarial drugs, resulted in 20-44% inhibition of IRBC HMS activity. A similar inhibition was observed in the presence of scavengers of oxidative radicals, uric and benzoic acids. These inhibitors had only a minor effect on the HMS activity of free parasites. D-[1- $^{14}\text{C}$ ]glucose and D-[6- $^{14}\text{C}$ ]glucose contributed equally to newly synthesized **nucleic acids**, suggesting that ribose-5-phosphate needed for this synthesis is contributed by the non-oxidative activity of HMS. These results imply that a major portion of parasite HMS activity and the activated HMS of the host cell are devoted to counteract the endogenously generated oxidative stress.

L12 ANSWER 23 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1993:1984 HCAPLUS

DOCUMENT NUMBER: 118:1984

TITLE: Process for detecting mutations, transgenic mammal, transgenic mammalian cell, and process for testing agents or conditions for mutagenic properties

INVENTOR(S): Gossen, Jan Albert; Vijg, Jan

PATENT ASSIGNEE(S): Ingeny B.V., Neth.

SOURCE: PCT Int. Appl., 28 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9217605	A1	19921015	WO 1992-NL62	19920402
W: JP, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE				
NL 9100567	A	19921102	NL 1991-567	19910402
EP 579713	A1	19940126	EP 1992-909305	19920402
EP 579713	B1	19951004		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE				
JP 06506357	T2	19940721	JP 1992-508708	19920402
AT 128735	E	19951015	AT 1992-909305	19920402
ES 2078043	T3	19951201	ES 1992-909305	19920402
US 5602300	A	19970211	US 1993-122562	19931229
PRIORITY APPLN. INFO.:			NL 1991-567	A 19910402
			WO 1992-NL62	W 19920402

AB A process for detecting mutations in the DNA of transgenic mammals or

mammalian cells is described. The transgenic mammal/cell contains a linearized plasmid containing a lacZ operator-lacZ gene construct. The DNA of the mammal/cell is isolated and the plasmid is released by digestion with a restriction enzyme. The digested DNA is **contacted** with solid particles to which a lacZ operator binding material is attached. After removal of the nonbinding DNA, the specifically bound DNA is released, the plasmid is circularized and then used to transform a restriction-neg., lacZ-neg., galE-neg. **bacterial** host. The transformants are cultured on lactose-containing medium on which only the **bacteria** can grow which possess no  $\beta$ -galactosidase as a result of mutation of the lacZ gene. The process was demonstrated with a transgenic mouse containing  $\lambda$ gt10 into which lacZ-containing pUR288 was inserted. The vector was released by EcoRI digestion and captured by magnetic beads to which anti- $\beta$ -galactosidase antibody complexed with LacI repressor- $\beta$ -galactosidase fusion protein was attached. The **bacterial** host was Escherichia coli.

L12 ANSWER 24 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1989:110086 HCAPLUS  
 DOCUMENT NUMBER: 110:110086  
 TITLE: Biochemical changes induced by **fenpropathrin** in the sixth instar larvae of Tribolium castaneum (Herbst) (Coleoptera: Tenebrionidae)  
 AUTHOR(S): Shakoori, A. R.; Fayyaz, M.; Saleem, M. A.  
 CORPORATE SOURCE: Dep. Zool., Univ. Punjab, Lahore, Pak.  
 SOURCE: Journal of Stored Products Research (1988), 24(4), 215-20  
 CODEN: JSTPAR; ISSN: 0022-474X  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB Sixth instar larvae of T. castaneum were exposed to one of four sublethal concns. i.e. 10, 20, 200 or 400 mg/L, of a synthetic pyrethroid, **fenpropathrin** (I), for 48 h. The lactate dehydrogenase **activity decreased** 44, 15 and 10% after exposure to I at 20, 200 and 400 mg/L resp., while a significant increase was recorded in glutamate oxalacetate transaminase (15, 16, 34 and 37%) and glutamate pyruvate transaminase (6, 20, 13 and 29%) resp. after exposure to 10, 20, 200 and 400 mg/L. The amylase and acid phosphatase activities remained unaffected. The trehalase **activity increased** 42, 72 and 149%, after 20, 200 and 400 mg/L, the isocitrate dehydrogenase **activity increased** 28 and 67% after 10 and 20 mg/L, and alkaline phosphatase **activity increased** 13 and 12% after 10 and 400 mg/L resp. The weaker (10 and 20 mg/L) and stronger (200 and 400 mg/L) doses elicited two different types of responses. A dose of 20 mg/L resulted in increased soluble proteins (14%), lipids (49%), cholesterol (57%), RNA (18%), and DNA (32%) content per larva, while the stronger dose of 400 mg/L resulted in their decrease except for lipids. The total proteins, lipids and free amino acids content per larva were not affected by either concentration, while the glucose content per insect decreased with increasing concentration of I.

L12 ANSWER 25 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1978:612694 HCAPLUS  
 DOCUMENT NUMBER: 89:212694  
 TITLE: Development of glycogen and phospholipid metabolism in fetal and newborn rat lung  
 AUTHOR(S): Maniscalco, William M.; Wilson, Christine M.; Gross, Ian; Gobran, Laurice; Rooney, Seamus A.; Warshaw, Joseph B.  
 CORPORATE SOURCE: Dep. Pediatr., Yale Univ. Sch. Med., New Haven, CT,

USA  
.SOURCE: Biochimica et Biophysica Acta, Lipids and Lipid Metabolism (1978), 530(3), 333-46  
CODEN: BBLA6; ISSN: 0005-2760  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB The developmental patterns of glycogen content, glycogen synthase activity, glycogen phosphorylase activity, and glucose oxidation in fetal and newborn rat lung were examined. These patterns were correlated with the development of phosphatidylcholine synthesis and content and the activities of enzymes involved in phosphatidylcholine synthesis. Fetal lung glycogen concentration increased until day 20 of gestation (term is 22 days) after which it declined to low levels. The activities of both glycogen synthase I and total glycogen synthase (I + D) in fetal lung increased late in gestation. Increased lung glycogen concentration preceded changes in enzyme activity. Phosphorylase a and total phosphorylase (a + b) activity in fetal lung increased during the period of prenatal glycogen depletion. The activity of the pentose phosphate **path**, as measured by the ratio of CO<sub>2</sub> derived from oxidation of C1 and C6 of glucose, declined after birth. Fetal lung total phospholipid, phosphatidylcholine, and disatd. phosphatidylcholine content increased by 60, 90 and 180%, resp., between day 19 of gestation and the 1st postnatal day. Incorporation of choline into phosphatidylcholine and disatd. phosphatidylcholine increased 10-fold during this time. No changes in phosphatidylcholine enzyme activities were noted during gestation, but both choline phosphate cytidylyltransferase and phosphatidate phosphatase **activity increased** after birth. The possible contributions of carbohydrate derived from fetal lung glycogen to phospholipid synthesis are discussed.

L12 ANSWER 26 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN  
ACCESSION NUMBER: 1976:572236 HCAPLUS  
DOCUMENT NUMBER: 85:172236  
TITLE: The mechanism of fungistatic action of sec-butylamine.  
I. Effects of sec-butylamine on the metabolism of hyphae of *Penicillium digitatum*  
AUTHOR(S): Yoshikawa, M.; Eckert, J. W.  
CORPORATE SOURCE: Dep. Plant Pathol., Univ. California, Riverside, CA, USA  
SOURCE: Pesticide Biochemistry and Physiology (1976), 6(5), 471-81  
CODEN: PCBPBS; ISSN: 0048-3575  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB Growth of *P. digitatum* was inhibited after a 40-min incubation in a culture medium containing 0.5 mM (-)-sec-butylamine-HCl [31519-50-3], and the dry weight of the hyphae was 50% of the control value after 180 min. Respiration of the hyphae was reduced 13% after a 20-min **contact** with 0.5 mM sec-butylamine but this treatment did not influence the uptake of amino acids, glucose [50-99-7], or phosphate nor intensify the efflux of 33P- or 14C-labeled metabolites from the cells. The syntheses of cell walls and total lipids were inhibited 20-30% after a 90-min incubation with sec-butylamine, and **nucleic acid** synthesis was reduced to about 50% of the control value at this time. Sec-Butylamine inhibited the incorporation of C from glucose-14C into the protein fraction of the hyphae to a greater degree than 14C derived from labeled proline, lysine, or leucine, suggesting that sec-butylamine interfered primarily with the intermediary metabolism of glucose rather than inhibiting a later stage of macromol. synthesis. Hyphae incubated with glucose-14C and sec-butylamine accumulated pyruvic acid [127-17-3] to a

level 7 times greater than in control hyphae. Furthermore, sec-butylamine strongly inhibited  $^{14}\text{CO}_2$  evolution from hyphae metabolizing pyruvate- $^{14}\text{C}$  whereas  $\text{CO}_2$  derived from acetate or glucose after a 45-min incubation was only slightly reduced by sec-butylamine. These observations implicate pyruvate oxidation as the primary site of sec-butylamine action in young hyphae of *P. digitatum*.

L12 ANSWER 27 OF 27 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1955:84897 HCAPLUS

DOCUMENT NUMBER: 49:84897

ORIGINAL REFERENCE NO.: 49:16049f-g

TITLE: Factors controlling the variability of oxidative activities of ***Azotobacter***

AUTHOR(S): Maeda, Kimiko; Usami, Shoichiro

CORPORATE SOURCE: Hokkaido Univ., Sapporo

SOURCE: Koso Kagaku Shinpojumu (1954), 10, 228-35, discussion 235-7

CODEN: KKSHAL; ISSN: 0452-6236

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

AB Variation in oxidative activities of *A. vinelandii* on various substrates was estimated under various conditions. Resting cells were suspended in a 0.04M phosphate buffer of pH 7.2 containing glucose, succinic, fumaric, malic, or lactic acids as the "inducer," and oxidative activities on several substrates were measured under aeration at 30°. Enzyme formation by inducer occurred only in the cells grown by mol. N fixation. The types of enzymes formed varied with the variety of inducers. L-Leucine oxidase was produced in cells grown heterotrophically with respect to N, and its **activity increased** as  $\text{PO}_4$  concentration in the media decreased. The enzyme disappeared when N metabolism in cells turned autotrophic.

=&gt; d que stat l14

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L2      .      54 SEA FILE=REGISTRY ABB=ON (127-69-5/BI OR 13436-46-9/BI OR
15912-98-8/BI OR 18766-96-6/BI OR 18871-14-2/BI OR 19322-27-1/B
I OR 200010-29-3/BI OR 200010-31-7/BI OR 204514-85-2/BI OR
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273912-17-7/BI OR 273912-18-8/BI OR 273912-19-9/BI OR 27538-10-
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-6/BI OR 374579-10-9/BI OR 374579-11-0/BI OR 374579-12-1/BI OR
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OR 50-99-7/BI OR 50632-57-0/BI OR 527-50-4/BI OR 54458-61-6/BI
OR 5694-72-4/BI OR 59995-48-1/BI OR 60047-17-8/BI OR 68043-00-5
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95962-14-4/BI OR 979-92-0/BI)
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L7      5704 SEA FILE=HCAPLUS ABB=ON L6 AND (?POLYPEPTID? OR ?SMALL?(W)?MOL
ECUL? OR L5 OR ?NUCLEIC?(W)?ACID?)
L8      29 SEA FILE=HCAPLUS ABB=ON L7 AND (?ACTIVITY?)(W) (?INCREAS? OR
?DECREAS?)
L10     70 SEA FILE=HCAPLUS ABB=ON L7 AND ?CONTACT?
L11     99 SEA FILE=HCAPLUS ABB=ON L8 OR L10
L12     27 SEA FILE=HCAPLUS ABB=ON L11 AND (?PATH? OR ?BACT?)
L13     16 SEA L12
L14     16 DUP REMOV L13 (0 DUPLICATES REMOVED)

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=&gt; d ibib abs l14 1-16

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L14 ANSWER 1 OF 16 EMBASE COPYRIGHT (c) 2005 Elsevier B.V. All rights
reserved on STN
ACCESSION NUMBER: 2005306646 EMBASE
TITLE: Vancomycin-resistant enterococci: Consequences for therapy
and infection control.
AUTHOR: Mascini E.M.; Bonten M.J.M.
CORPORATE SOURCE: M.J.M. Bonten, Eijkman-Winkler Institute for Medical
Microbiology Infectious Diseases and Inflammation,
University Medical Center Utrecht, Heidelberglaan 100, 3584
CX Utrecht, Netherlands. m.j.m.bonten@digd.azu.nl
SOURCE: Clinical Microbiology and Infection, Supplement, (2005)
Vol. 11, No. 4, pp. 43-56.
Refs: 141
ISSN: 1470-9465
COUNTRY: United Kingdom
DOCUMENT TYPE: Journal; General Review
FILE SEGMENT: 004 Microbiology
017 Public Health, Social Medicine and Epidemiology
030 Pharmacology
036 Health Policy, Economics and Management
037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English
ENTRY DATE: Entered STN: 20050728
Last Updated on STN: 20050728
AB Vancomycin-resistant enterococci (VRE) have emerged as important
nosocomial pathogens, initially in the USA, but now also in
Europe, where hospital outbreaks are being reported with increasing
frequency, although the incidence of VRE infections remains extremely low

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in most European countries. The recently demonstrated in-human transmission of vancomycin resistance from VRE to methicillin-resistant *Staphylococcus aureus* (MRSA) in two American patients underscores the potential danger of a coexisting reservoir of both **pathogens**. As MRSA is already endemic in many European hospital settings, prevention of endemicity with VRE seems relevant, but should be balanced against the costs associated with the implementation of effective strategies. The presence of a large community reservoir of VRE in Europe could hamper the feasibility of infection control strategies. Although the prevalence of colonisation amongst healthy subjects has apparently decreased after the ban on avoparcin use in the agricultural industry, a large proportion of admitted patients are still potential sources of VRE transmission. With no risk profile available to identify these carriers, effective screening, followed by barrier precautions for carriers, seems to be impossible. Recent studies, however, have suggested that hospital outbreaks are almost exclusively caused by specific genogroups of VRE that can be characterised phenotypically and genotypically (e.g., co-resistance to ampicillin and the presence of the variant *esp* gene). Based on our own experience, we propose that VRE infection control programmes should be restricted to patients colonised with these VRE strains. If such a strain is cultured from a clinical sample, surveillance amongst **contact** patients is recommended and barrier precautions should be implemented in the case of documented spread. .COPYRG. 2005 Copyright by the European Society of Clinical Microbiology and Infectious Diseases.

L14 ANSWER 2 OF 16 EMBASE COPYRIGHT (c) 2005 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER: 2004084349 EMBASE  
 TITLE: Sexually transmissible infections other than HIV.  
 AUTHOR: Donovan B.  
 CORPORATE SOURCE: Dr. B. Donovan, Sydney Sexual Health Centre, Sydney Hospital, PO Box 1614, Sydney, NSW 2001, Australia. donovanb@sesahs.nsw.gov.au  
 SOURCE: Lancet, (14 Feb 2004) Vol. 363, No. 9408, pp. 545-556.  
 Refs: 143  
 ISSN: 0140-6736 CODEN: LANCAO  
 COUNTRY: United Kingdom  
 DOCUMENT TYPE: Journal; Conference Article  
 FILE SEGMENT: 004 Microbiology  
 006 Internal Medicine  
 010 Obstetrics and Gynecology  
 017 Public Health, Social Medicine and Epidemiology  
 037 Drug Literature Index  
 LANGUAGE: English  
 SUMMARY LANGUAGE: English  
 ENTRY DATE: Entered STN: 20040311  
 Last Updated on STN: 20040311

AB Sexually transmitted infections (STIs) are notable for their fastidious requirements for transmission and growth in the laboratory and for their high physical and psychosocial morbidity. The combination of subtle or absent symptoms and stigma preventing the seeking of health care, leaves many infections undiagnosed. The development of **nucleic-acid** amplification tests heralded a new era in sensitive and robust diagnostic procedures for STIs. Unfortunately, many of these tests are not commercially available or are too expensive for the populations that need them most. Single-dose oral azithromycin has improved the treatment of several **bacterial** STIs, but quinolones are rapidly becoming ineffective for gonorrhoea. Self-treatment of genital warts with podophyllotoxin or imiquimod preparations is attractive to patients and might be cost effective for health services. The prospect of effective



vaccines against genital papillomaviruses in the near future is real. Such vaccines could reduce the global incidence of some anogenital cancers. Episodic treatment of genital herpes is getting easier and cheaper, and suppressive treatment can reduce transmission to regular sexual partners. A vaccine against herpes simplex virus type 2 has shown some limited efficacy. Ultimately, better control of STIs, and reduction of their contribution to the spread of HIV, will require a broad health-sector response with adequate resourcing, and a change in social and political attitudes.

L14 ANSWER 3 OF 16 EMBASE COPYRIGHT (c) 2005 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER: 2004046015 EMBASE  
 TITLE: Anthrax - An overview.  
 AUTHOR: Oncu S.; Oncu S.; Sakarya S.  
 CORPORATE SOURCE: S. Oncu, Dept. Infect. Dis./Clin. Microbiol., Medical Faculty, Adnan Menderes University, 09100 Aydin, Turkey. serkanoncu@hotmail.com  
 SOURCE: Medical Science Monitor, (2003) Vol. 9, No. 11, pp. RA276-RA283.  
 Refs: 86  
 ISSN: 1234-1010 CODEN: MSMOFR  
 COUNTRY: United States  
 DOCUMENT TYPE: Journal; General Review  
 FILE SEGMENT: 004 Microbiology  
 005 General Pathology and Pathological Anatomy  
 017 Public Health, Social Medicine and Epidemiology  
 037 Drug Literature Index  
 LANGUAGE: English  
 SUMMARY LANGUAGE: English  
 ENTRY DATE: Entered STN: 20040212  
 Last Updated on STN: 20040212

AB Anthrax, a disease of mammals (including humans), is caused by a spore-forming Gram-positive bacilli called *Bacillus anthracis*. Anthrax is one of the oldest threats to humanity, and remains endemic in animals in many parts of the world. The incidence of anthrax has decreased in developed countries, but it remains a considerable health problem in developing countries. The disease is transmitted to humans by **contact** with sick animals or their products, such as wool, skin, meat etc. Capsular **polypeptide** and anthrax toxin are the principal virulence factors of *B. anthracis*. Anthrax toxin consists of three proteins called protective antigen, edema factor, and lethal factor, each of which is nontoxic but acts synergistically. Human anthrax has three major clinical forms: cutaneous, inhalational, and gastrointestinal. The diagnosis is easily established in cutaneous cases, characterized by black eschar. Severe intoxication and collapse during the course of bronchopneumonia or hemorrhagic enteritis should prompt suspicion of anthrax. Treatment with antibiotics is mandatory. If untreated, anthrax in all forms can lead to septicemia and death. Recently, considerable attention has been focused on the potential for *B. anthracis* to be used in acts of biological terrorism. The ease of laboratory production and its dissemination via aerosol led to its adoption by terrorists, as shown by recent events in the USA. A good knowledge of anthrax, its epidemiology, **pathogenesis**, clinical forms and potential as a biological weapon is essential for timely prevention and treatment. This review summarizes the current knowledge on anthrax.

L14 ANSWER 4 OF 16 EMBASE COPYRIGHT (c) 2005 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER: 2003291638 EMBASE

TITLE: Pharmacological interaction of drugs with antigen-specific immune receptors: The p-i concept.  
AUTHOR: Pichler W.J.  
CORPORATE SOURCE: W.J. Pichler, Inselspital, CH-3010 Bern, Switzerland. werner.pichler@insel.ch  
SOURCE: Current Opinion in Allergy and Clinical Immunology, (2002) Vol. 2, No. 4, pp. 301-305.  
Refs: 36  
ISSN: 1528-4050 CODEN: COACCS  
COUNTRY: United States  
DOCUMENT TYPE: Journal; General Review  
FILE SEGMENT: 013 Dermatology and Venereology  
026 Immunology, Serology and Transplantation  
037 Drug Literature Index  
038 Adverse Reactions Titles  
LANGUAGE: English  
SUMMARY LANGUAGE: English  
ENTRY DATE: Entered STN: 20030731  
Last Updated on STN: 20030731

AB Purpose of review: Drug allergies are examples of immune reactions to **small molecular** compounds. In many drug allergies drug specific CD4+ and CD8+ T-cells can be detected, which recognize small chemicals via their  $\alpha\beta$ -T-cell receptor in a major histocompatibility complex dependent way. In this review a new concept of drug presentation to T-cells is presented. Recent findings: Drugs were stimulatory for T-cells if they bound covalently to peptides or proteins, but also if the drug had structural features allowing it to bind in a labile way (noncovalently) to the major histocompatibility peptide complex. This latter binding method has some similarities to superantigen stimulations and can explain allergies to drugs that are not metabolized. It has been described in patients with maculopapular, bullous and neutrophilic drug eruption, as well as in **contact** dermatitis. Summary: Noncovalent drug presentation leads to the stimulation of immune cells, namely T-cells. The drug needs two surface molecules (one inert serving as a scaffold, major histocompatibility complex, and one reactive, T-cell receptor) to exert its function. Although two receptor structures are involved, the process is reminiscent of a pharmacological interaction between a drug and its receptors and, from the phrase pharmacological interaction with immune receptors, was thus termed the p-i concept. .COPYRG. 2002 Lippincott Williams & Wilkins.

L14 ANSWER 5 OF 16 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN  
ACCESSION NUMBER: 2001:574903 BIOSIS  
DOCUMENT NUMBER: PREV200100574903  
TITLE: Permeability and route of entry for lipid-insoluble molecules across brain barriers in developing *Monodelphis domestica*.  
AUTHOR(S): Ek, C. Joakim; Habgood, Mark D.; Dziegielewska, Katarzyna M.; Potter, Ann; Saunders, Norman R. [Reprint author]  
CORPORATE SOURCE: Department of Anatomy and Physiology, University of Tasmania, Hobart, TAS, 7001, Australia n.saunders@utas.edu.au  
SOURCE: Journal of Physiology (Cambridge), (November 1st, 2001) Vol. 536, No. 3, pp. 841-853. print.  
CODEN: JPHYA7. ISSN: 0022-3751.  
DOCUMENT TYPE: Article  
LANGUAGE: English  
ENTRY DATE: Entered STN: 12 Dec 2001  
Last Updated on STN: 25 Feb 2002

AB 1. We have studied the permeability of blood-brain barriers to

**small molecules** such as (14C)sucrose, (3H)inulin, (14C)L-glucose and (3H)glycerol from early stages of development (postnatal day 6, P6) in South American opossums (*Monodelphis domestica*), using a litter-based method for estimating steady-state cerebrospinal fluid (CSF)/plasma and brain/plasma ratios of markers that were injected I.P. 2. Steady-state ratios for L-glucose, sucrose and inulin all showed progressive decreases during development. The rate of uptake of L-glucose into the brain and CSF, in short time course experiments (7-24 min) when age-related differences in CSF production can be considered negligible also decreased during development. These results indicate that there is a significant decrease in the permeability of brain barriers to small lipid-insoluble molecules during brain development. 3. The steady-state blood/CSF ratio for 3000 Da lysine-fixable biotin-dextran following I.P. injection was shown to be consistent with diffusion from blood to CSF. It was therefore used to visualise the route of penetration for small lipid-insoluble molecules across brain barriers at P0-30. The proportion of biotin-dextran-positive cells in the choroid plexuses declined in parallel with the age-related decline in permeability to the **small -molecular-weight** markers; the paracellular (tight junction) **pathway** for biotin-dextran appeared to be blocked, but biotin-dextran was easily detectable in the CSF. A transcellular route from blood to CSF was suggested by the finding that some choroid plexus epithelial cells contained biotin-dextran. 4. Biotin-dextran was also taken up by cerebral endothelial cells in the youngest brains studied (P0), but in contrast to the CSF, could not be detected in the brain extracellular space (i.e. a significant blood-brain barrier to small-sized lipid-insoluble compounds was already present). However, in immature brains (P0-13) biotin-dextran was taken up by some cells in the brain. These cells generally had **contact** with the CSF, suggesting that it is likely to have been the 2source of their biotin-dextran. Since the quantitative permeability data suggest that biotin-dextran behaves similarly to the radiolabelled markers used in this study, it is suggested that these markers in the more immature brains were also present intracellularly. Thus, brain/plasma ratios may be a misleading indicator of blood-brain barrier permeability in very immature animals. 5. The immunocytochemical staining for biotin-dextran in the CSF, in contrast to the lack of staining in the brain extracellular space, together with the quantitative permeability data showing that the radiolabelled markers penetrated more rapidly and to a much higher steady-state level in CSF than in the brain, suggests that lipid-insoluble molecules such as sucrose and inulin reach the immature brain predominantly via the CSF rather than directly across the very few blood vessels that are present at that time.

L14 ANSWER 6 OF 16 EMBASE COPYRIGHT (c) 2005 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER: 2001408881 EMBASE  
 TITLE: The **bacterial** flora in inflammatory bowel disease: Current insights in **pathogenesis** and the influence of antibiotics and probiotics.  
 AUTHOR: Linskens R.K.; Huijsdens X.W.; Savelkoul P.H.M.; Vandenbroucke-Grauls C.M.J.E.; Meuwissen S.G.M.  
 CORPORATE SOURCE: Dr. R.K. Linskens, Dept. of Gastroenterology, Vrije Universiteit Medical Centre, De Boelelaan 1117, 1057 HV Amsterdam, Netherlands. r.linskens@Yumc.nl  
 SOURCE: Scandinavian Journal of Gastroenterology, Supplement, (2001) Vol. 36, No. 234, pp. 29-40.  
 Refs: 166  
 ISSN: 0085-5928 CODEN: SJGSB8  
 COUNTRY: Norway  
 DOCUMENT TYPE: Journal; Conference Article

FILE SEGMENT: 004 Microbiology  
009 Surgery  
030 Pharmacology  
037 Drug Literature Index  
048 Gastroenterology

LANGUAGE: English

SUMMARY LANGUAGE: English

ENTRY DATE: Entered STN: 20011206

Last Updated on STN: 20011206

AB The **pathogenesis** of inflammatory bowel disease (IBD) remains unknown, although in recent years more data have become available. The contribution of genetic and environmental factors is evident, and the luminal **bacterial** flora plays a major role in the initiation and perpetuation of chronic IBD. Animal models of IBD have shown that colitis does not occur in a germ-free environment. In human IBD, inflammation is present in parts of the gut containing the highest **bacterial** concentrations. Moreover, the terminal ileum, caecum and rectum are areas of relative stasis, providing prolonged mucosal **contact** with luminal contents. Enhanced mucosal permeability may play a pivotal role in maintaining a chronic inflammatory state, due to a genetic predisposition or as a result of direct **contact** with **bacteria** or their products. A defective epithelial barrier may cause a loss of tolerance to the normal enteric flora. Furthermore, an increased mucosal absorption of viable **bacteria** and **bacterial** products is found in IBD. Serum and secreted antibodies are increased and mucosal T-lymphocytes that recognize luminal **bacteria** are present. However, there is evidence that the immune system reacts over aggressively towards the normal luminal flora rather than the flora being altered in IBD. Several approaches have been used in attempts to discover a specific microbial agent in the cause of IBD. These include demonstration of the presence of organisms or specific antigens in affected tissues, culture of microbes from the affected tissues, demonstration of serological responses to several agents, and localization and detection of individual **pathogen**-specific **nucleic acid** sequences in affected tissue by in situ hybridization and polymerase chain reaction. So far, no specific micro-organism has been directly associated with the **pathogenesis** of IBD. Analysis of the luminal enteric flora, however, has revealed differences in the composition of this flora compared to healthy controls. In Crohn disease, concentrations of **Bacteroides**, **Eubacteria** and **Peptostreptococcus** are increased, whereas **Bifidobacteria** numbers are significantly reduced. Furthermore, in ulcerative colitis, concentrations of facultative anaerobic **bacteria** are increased. The arrival of new molecular techniques qualifying and quantifying the complex intestinal flora has induced a revival of interest in this microflora. Therapeutic approaches geared towards changing the environment at the mucosal border have been attempted by the use of elemental diets, total parenteral nutrition, surgical diversion of the faecal stream and antibiotics. Over the past few years, the use of probiotics in IBD and other intestinal disorders has gained attention. Strengthened by promising experimental data and commercial interests, research in this field is rapidly expanding. Manipulation of the colonic **bacteria** with antibiotic drugs and probiotic agents may prove to be more effective and better tolerated than immunosuppressants in the future.

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ACCESSION NUMBER: 1997:18418 BIOSIS

DOCUMENT NUMBER: PREV199799317621

TITLE: Lactic acid **bacteria** in food: Use and safety.

AUTHOR(S): Desmazeaud, Michel  
 CORPORATE SOURCE: INRA, Unite de Recherches Laitieres, 78352 Jouy-en-Josas  
 cedex, France  
 SOURCE: Cahiers Agricultures, (1996) Vol. 5, No. 5, pp. 331-343.  
 ISSN: 1166-7699.  
 DOCUMENT TYPE: Article  
 LANGUAGE: French  
 ENTRY DATE: Entered STN: 15 Jan 1997  
 Last Updated on STN: 23 Jan 1997

AB Lactic acid **bacteria** have an essential role in most food and beverage fermentation processes, one of the earliest known food preservation methods. Species used in the preparation of fermented foods and beverages belong to the following genera: *Lactococcus*, *Lactobacillus*, *Leuconostoc*, *Pediococcus*, *Streptococcus*, and sometimes ***Carnobacterium***, *Enterococcus* and ***Bifidobacterium***. The main role of lactic acid **bacteria** in food manufacturing is to acidify raw materials by producing large amounts of lactic acid (homofermentative **bacteria**), or lactic acid, along with acetic acid, ethanol, CO<sub>2</sub> (heterofermentative **bacteria**), from energy sources (carbon hydrates such as lactose, glucose, fructose and sucrose). Mechanisms of sugar transport in cells differ according to species. *Lactococci*, for instance, have a system for lactose and glucose transport, i.e. the phosphoenolpyruvate (PEP)-dependent phosphotransferase system (PTS). *Leuconostoc*, several *Lactobacilli* and *Streptococcus thermophilus* have a permease system. In addition, the growth of these **bacteria** on raw material depends on their cell-wall proteinase system to degrade protein (casein in milk), enabling them to acquire essential nitrogenous compounds (amino acids and peptides). Furthermore, several **bacterial** species are responsible for producing flavours and aromas in cultured products. Citrate is an important substrate for the production of butter flavour (diacetyl). Lactic acid **bacteria** also have a complex proteolytic system that functions during product ripening. This amino acid and peptide production also generates flavour. Lactic acid **bacteria** can produce a variety of antimicrobial compounds, which may affect both the **bacteria** and undesirable or **pathogenic** strains. Oxygen metabolites (hydrogen peroxide and free radicals) exhibit **bacteriostatic** or **bactericidal** activity. Inhibitory compounds are formed when hydrogen peroxide is associated with the lactoperoxidase/thiocyanate system. **Bacteriocins** can be produced by most lactic acid **bacteria**, nisin being used for safety by elimination of sporulated **bacteria** or *Listeria monocytogenes*. In dairy industries, lactic acid **bacteria** are responsible for milk acidification and curd formation (with rennet) in cheese-making, and yoghurt or fermented milk production. During cheese ripening, the milk protein (casein) is degraded into large and small **polypeptides**, and into amino acids, leading to aroma release. In yoghurt, thermophilic **bacteria** produce acetaldehyde, the main flavour compound, and polysaccharides which give texture. Lactic acid **bacteria** naturally present in grapes ensure malolactic fermentation in red wine, including the transformation of L-malic acid into lactic acid, after alcoholic fermentation. **Bacteria** is used worldwide for transforming plant materials, and provide an inexpensive means of preserving foods in the tropics. *Lactobacillus sake*, *L. curvatus*, ***Carnobacterium piscicola*** and *C. divergens* are the main species found in meat products. They acidify the substrate, and also modify flavour, colour and hygienic stability. Several potential health and nutritional benefits are possible through some lactic acid **bacteria** species, including: improved nutritional value for food, control of intestinal infections, improved lactose digestion, control of some types of cancer, and control of

mineralization and serum cholesterol levels. The first **contact** of ingested lactic acid **bacteria** with the immune system occurs in gut-associated lymphoid tissue. This increases the secretion of specific antibodies, the percentage of B lymphocytes in Peyer's patches, and proliferative responses of these cells to stimulants. Iatrogenic cases reported in the literature, although extremely rare, suggest that lactic acid **bacteria** are becoming **pathogenic**. Indeed, in such cases, there is always a severe underlying disease, and often an obvious portal of entry. Construction of recombinant strains of lactic acid **bacteria** has become an important objective for solving industrial fermentation problems. Food-grade recombinant strains can now be obtained by new genetic methods. In conclusion, lactic acid **bacteria** have long been consumed by people throughout the world, and there is still insufficient evidence to suggest that their use in food fermentations could be dangerous.

L14 ANSWER 8 OF 16 EMBASE COPYRIGHT (c) 2005 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER: 96214082 EMBASE  
DOCUMENT NUMBER: 1996214082  
TITLE: Degradation of pyrimidine ribonucleosides by *Pseudomonas aeruginosa*.  
AUTHOR: West T.P.  
CORPORATE SOURCE: Department of Biological Sciences, University of Southern Mississippi, Hattiesburg, MS 39406, United States  
SOURCE: Antonie van Leeuwenhoek, International Journal of General and Molecular Microbiology, (1996) Vol. 69, No. 4, pp. 331-335.  
ISSN: 0003-6072 CODEN: ALJMAO  
COUNTRY: Netherlands  
DOCUMENT TYPE: Journal; Article  
FILE SEGMENT: 004 Microbiology  
029 Clinical Biochemistry  
LANGUAGE: English  
SUMMARY LANGUAGE: English  
ENTRY DATE: Entered STN: 960814  
Last Updated on STN: 960814

AB Pyrimidine ribonucleoside degradation in the human **pathogen** *Pseudomonas aeruginosa* ATCC 15692 was investigated. Either uracil, cytosine, 5-methylcytosine, thymine, uridine or cytidine supported *P. aeruginosa* growth as a nitrogen source when glucose served as the carbon source. Using thin-layer chromatographic analysis, the enzymes nucleoside hydrolase and cytosine deaminase were shown to be active in ATCC 15692. Compared to (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub>-grown cells, nucleoside hydrolase activity in ATCC 15692 approximately doubled after growth on 5-methylcytosine as a nitrogen source while its cytosine deaminase **activity increased** several-fold after growth on the pyrimidine bases and ribonucleosides examined as nitrogen sources. Regulation at the level of protein synthesis by 5-methylcytosine was indicated for nucleoside hydrolase and cytosine deaminase in *P. aeruginosa*.

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ACCESSION NUMBER: 95097536 EMBASE  
DOCUMENT NUMBER: 1995097536  
TITLE: Tetrabrachion: A filamentous **archaeobacterial** surface protein assembly of unusual structure and extreme stability.  
AUTHOR: Peters J.; Nitsch M.; Kuhlmoorgen B.; Golbik R.; Lupas A.; Kellermann J.; Engelhardt H.; Pfander J.-P.; Muller S.;

CORPORATE SOURCE: Goldie K.; Engel A.; Stetter K.-O.; Baumeister W.  
Max-Planck-Institut fur Biochemie, Am Klopferspitz  
18a,D-82152 Martinsried, Germany  
SOURCE: Journal of Molecular Biology, (1995) Vol. 245, No. 4, pp.  
385-401.  
ISSN: 0022-2836 CODEN: JMOBAK  
COUNTRY: United Kingdom  
DOCUMENT TYPE: Journal; Article  
FILE SEGMENT: 004 Microbiology  
LANGUAGE: English  
SUMMARY LANGUAGE: English  
ENTRY DATE: Entered STN: 950412  
Last Updated on STN: 950412

AB The surface (S-) layer of the hyperthermophilic **archaebacterium** *Staphylothermus marinus* was isolated, dissected into separate domains by chemical and proteolytic methods, and analyzed by spectroscopic, electron microscopic and biochemical techniques. The S-layer is formed by a poorly ordered meshwork of branched, filiform morphological subunits resembling dandelion seed-heads. A morphological subunit (christened by us tetrabrachion) consists of a 70 nm long, almost perfectly straight stalk ending in four straight arms of 24 nm length that provide lateral connectivity by end-to-end **contacts**. At 32 nm from the branching point, tetrabrachion carries two globular particles of 10 nm diameter that have both tryptic and chymotryptic protease activity. Tetrabrachion is built by a tetramer of M(r) 92,000 **polypeptides** that form a parallel, four-stranded  $\alpha$ -helical rod and separate at one end into four strands. These strands interact in a 1:1 stoichiometry with **polypeptides** of M(r) 85,000 to form the arms. The arms are composed entirely of  $\beta$ -sheets. All S-layer components contain bound carbohydrates (glucose, mannose, and glucosamine) at a ratio of 38 g/100 g protein for the complete tetrabrachion-protease complex. The unique structure of tetrabrachion is reflected in an extreme thermal stability in the presence of strong denaturants (1% (w/v) SDS or 6M guanidine): the arms, which are stabilized by intramolecular disulphide bridges, melt around 115°C under non-reducing conditions, whereas the stalk sustains heating up to about 130°C. Complete denaturation of the stalk domain requires treatment with 70% (v/v) sulfuric acid or with fuming trifluoromethanesulfonic acid. The globular protease can be heated to 90°C in 6M guanidine and to 120°C in 1% SDS and represents one of the most stable proteases characterized to date.

L14 ANSWER 10 OF 16 MEDLINE on STN  
ACCESSION NUMBER: 94110215 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 8282686  
TITLE: Determination of the growth rate-regulated steps in  
expression of the Escherichia coli K-12 gnd gene.  
AUTHOR: Pease A J; Wolf R E Jr  
CORPORATE SOURCE: Department of Biological Sciences, University of Maryland  
Baltimore County, Catonsville 21228.  
CONTRACT NUMBER: GM27113 (NIGMS)  
SOURCE: Journal of bacteriology, (1994 Jan) 176 (1) 115-22.  
Journal code: 2985120R. ISSN: 0021-9193.  
PUB. COUNTRY: United States  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 199402  
ENTRY DATE: Entered STN: 19940228  
Last Updated on STN: 19940228  
Entered Medline: 19940214

AB In *Escherichia coli* K-12 strain W3110, the amount of 6-phosphogluconate dehydrogenase relative to that of total protein, i.e., the specific enzyme **activity, increases** about threefold during growth in minimal media over the range of growth rates with acetate and glucose as sole carbon sources. Previous work with *gnd-lac* operon and protein fusion strains indicated that two steps in the expression of the *gnd* gene are subject to growth rate-dependent control, with at least one step being posttranscriptional. With both Northern (RNA) and slot blot analyses, we found that the amount of *gnd* mRNA relative to that of total RNA was 2.5-fold higher in cells growing in glucose minimal medium than in cells grown on acetate. Therefore, since the total mRNA fraction of total RNA is essentially independent of the growth rate, the amount of *gnd* mRNA relative to that of total mRNA increases about 2.5-fold with increasing growth rate. This indicates that most of the growth rate-dependent increase in 6-phosphogluconate dehydrogenase can be accounted for by the growth rate-dependent increase in *gnd* mRNA level. We measured the decay of *gnd* mRNA mass in the two growth conditions after blocking transcription initiation with rifampin and found that the stability of *gnd* mRNA does not change with growth rate. We also used a *gnd-lacZ* protein fusion to measure the functional mRNA half-life and found that it too is growth rate independent. Thus, the growth rate-dependent increase in the level of *gnd* mRNA is due to an increase in *gnd* transcription, and this increase is sufficient to account for the growth rate regulation of the 6-phosphogluconate dehydrogenase level. The dilemma posed by interpretations of the properties of *gnd-lac* fusion strains and by direct measurement of *gnd* mRNA level is discussed.

L14 ANSWER 11 OF 16 MEDLINE on STN  
 ACCESSION NUMBER: 95140058 MEDLINE  
 DOCUMENT NUMBER: PubMed ID: 7838186  
 TITLE: Hexose-monophosphate shunt activity in intact *Plasmodium falciparum*-infected erythrocytes and in free parasites.  
 AUTHOR: Atamna H; Pascarmona G; Ginsburg H  
 CORPORATE SOURCE: Department of Biological Chemistry, Hebrew University, Jerusalem, Israel.  
 SOURCE: Molecular and biochemical parasitology, (1994 Sep) 67 (1) 79-89.  
 Journal code: 8006324. ISSN: 0166-6851.  
 PUB. COUNTRY: Netherlands  
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
 LANGUAGE: English  
 FILE SEGMENT: Priority Journals  
 ENTRY MONTH: 199502  
 ENTRY DATE: Entered STN: 19950314  
 Last Updated on STN: 19970203  
 Entered Medline: 19950228

AB The hexose monophosphate shunt (HMS) produces NADPH for reductive antioxidant protection and for metabolic regulation, as well as ribose-5-phosphate needed for the synthesis of **nucleic acids**. Since malaria-infected red blood cells (RBC) are under endogenous oxidant stress, it was interesting to determine HMS activity in intact infected cells, as well as in free parasites. HMS activity was determined by measuring the evolution of  $^{14}\text{CO}_2$  from D-[1- $^{14}\text{C}$ ]glucose in normal RBC, in intact *Plasmodium falciparum*-infected RBC (IRBC) and in free parasites. The HMS activity of IRBC was found to be 78 times higher than that of normal RBC. This **activity increased** with parasite maturation from the ring stage toward the trophozoite stage, and declined at the schizont stage. The HMS activity of the parasite contributes 82% of the total observed in the intact IRBC, and that of the host cell is increased some 24-fold. The increased reducing capacity of



IRBC and free parasites were also evidenced by the larger ability for reductive accumulation of methylene blue. Since the endogenous oxidative stress is produced by the parasite digestion of the host cell's hemoglobin, inhibition of this process with protease inhibitors, by alkalinization of the parasite's food vacuole, or by the application of antimalarial drugs, resulted in 20-44% inhibition of IRBC HMS activity. A similar inhibition was observed in the presence of scavengers of oxidative radicals, uric and benzoic acids. These inhibitors had only a minor effect on the HMS activity of free parasites. D-[1-14C]glucose and D-[6-14C]glucose contributed equally to newly synthesized **nucleic acids**, suggesting that ribose-5-phosphate needed for this synthesis is contributed by the non-oxidative activity of HMS. These results imply that a major portion of parasite HMS activity and the activated HMS of the host cell are devoted to counteract the endogenously generated oxidative stress.

L14 ANSWER 12 OF 16 EMBASE COPYRIGHT (c) 2005 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER: 92221407 EMBASE  
 DOCUMENT NUMBER: 1992221407  
 TITLE: **Campylobacters** and enteritis.  
 AUTHOR: Healing T.D.; Greenwood M.H.; Pearson A.D.  
 CORPORATE SOURCE: Communicable Disease Centre, Public Health Laboratory Service, 61 Colindale Avenue, London NW9 5EQ, United Kingdom  
 SOURCE: Reviews in Medical Microbiology, (1992) Vol. 3, No. 3, pp. 159-167.  
 ISSN: 0954-139X CODEN: RMEMER  
 COUNTRY: United Kingdom  
 DOCUMENT TYPE: Journal; General Review  
 FILE SEGMENT: 004 Microbiology  
 017 Public Health, Social Medicine and Epidemiology  
 037 Drug Literature Index  
 048 Gastroenterology  
 LANGUAGE: English  
 SUMMARY LANGUAGE: English  
 ENTRY DATE: Entered STN: 920816  
 Last Updated on STN: 920816

AB **Campylobacters** are the **bacteria** most frequently reported as causing acute enteritis in the UK and most developed countries. They have been isolated from a wide range of domestic and wild birds and mammals as well as from man. 15 species have been described, but two (**Campylobacter jejuni** and **C. coli**) are particularly associated with human enteric infection. Infections with enteric **campylobacters** are seasonal in England and Wales, reaching a peak at the end of May, and the majority of these infections are apparently sporadic. About 10% are contracted abroad. Most human infections are transmitted by milk, water and poultry or via **contact** with pets or other domestic animals. The organisms do not multiply on foodstuffs and are rarely transmitted from person to person.

L14 ANSWER 13 OF 16 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

ACCESSION NUMBER: 1982:273559 BIOSIS  
 DOCUMENT NUMBER: PREV198274046039; BA74:46039  
 TITLE: THE ROLE OF ENDOGENOUS GASTRIC INHIBITORY POLY PEPTIDE IN THE ENTERO INSULAR AXIS.  
 AUTHOR(S): TAKEMURA J [Reprint author]; SEINO Y; YAMAMURA T; TSUDA K; SEINO S; ITOH N; IMURA H  
 CORPORATE SOURCE: SECOND DIV, DEP MED, KYOTO UNIV SCHOOL OF MED, 54 SHOGGIN KAWAHARA-CHO, SAKYO-KU, KYOTO 606, JAPAN

SOURCE: Journal of Clinical Endocrinology and Metabolism, (1982)  
Vol. 54, No. 5, pp. 909-913.  
CODEN: JCEMAZ. ISSN: 0021-972X.

DOCUMENT TYPE: Article

FILE SEGMENT: BA

LANGUAGE: ENGLISH

AB To elucidate the relationship between the release of gastric inhibitory **polypeptide** (GIP) and insulin, plasma GIP and insulin concentration responses to meal ingestion were compared in normal subjects and patients with various surgical modifications of the food **pathway**. Nine patients with Billroth I partial gastrectomy (BI), 7 patients with Billroth II partial gastrectomy (BII) and 6 patients with total gastrectomy (TG) were tested. In BI patients the increase in blood glucose was similar to that in normal subjects, but the response was significantly greater in BII and TG patients. In TG patients blood glucose rose significantly higher in response to a standard meal than in all other groups. In TG patients blood glucose rose significantly higher in response to a standard meal than in all other groups. In BI patients the mean peak GIP level after meal ingestion was significantly higher than in normal subjects. In BII and TG patients an extremely exaggerated GIP response after the meal was observed. The insulin response to feeding was increased only in the BII and TG patients. Since the insulin response was enhanced only when both the glucose and GIP responses were magnified, endogenous GIP may be a glucose-dependent insulinotropic factor. In addition, from the fact that meal-stimulated GIP release is most marked in patients with total gastrectomy, the direct **contact** of food with the GIP-producing cells, apparently is a strong mechanical or chemical stimulus for GIP release.

L14 ANSWER 14 OF 16 MEDLINE on STN

ACCESSION NUMBER: 83118789 MEDLINE

DOCUMENT NUMBER: PubMed ID: 6130578

TITLE: [Absorption of substances dissolved in the environment, particles and products of extracellular digestion in *Actinia equina* (Cnidaria, Actiniaria)].  
Absorption des substances dissoutes dans le milieu, des particules et des produits de la digestion extracellulaire chez *Actinia equina* (Cnidaria, Actiniaria).

AUTHOR: Van Praet M

SOURCE: Reproduction, nutrition, development, (1980) 20 (4B)  
1393-9.

Journal code: 8005903. ISSN: 0181-1916.

PUB. COUNTRY: France

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: French

FILE SEGMENT: Priority Journals

ENTRY MONTH: 198303

ENTRY DATE: Entered STN: 19900318

Last Updated on STN: 19950206

Entered Medline: 19830311

AB The results of nutrition experiments with glucose 14C, leucine 3H, amino acids 14C, cyanophyceae 14C and lipids have permitted me to enlarge our present knowledge of actinian nutrition. Ectodermal absorption.--Glucose and amino acids dissolved in the sea-environment were rapidly absorbed by the ectoderm. The multiple tentacles of *Actinia* and their cell microvilli enlarged the ectodermal surface. There is no preoral digestion, and the macromolecules were not absorbed since the ectoderm does not possess phagocytic cells. Digestion and endodermal absorption.--Macromolecules, particles and prey were carried into the coelenteron. The prey were enclosed in the convoluted lower part of mesenteries where they were

divided into fragments and molecules by enzymes secreted by the zymogen cells of the mesenterial filaments. The macromolecules, particles and prey fragments (up to a few micrometers) produced by this extracellular digestion, or collected in the environment, were absorbed by the phagocytic cells. The lipids were pinocytosed by the same cells concentrated in some parts of the endoderm, but the **smallest molecules** (carbohydrates and amino acids) were immediately absorbed by the mesenterial filament cells in **contact** with the prey. The transfer (in both directions) of the different absorbed substances between the ectoderm and the endoderm was slow. Glucose seemed to diffuse through the mesoglea, while the amino acids and the macromolecules would be transferred by the mobile cells of the mesoglea.

L14 ANSWER 15 OF 16 MEDLINE on STN  
 ACCESSION NUMBER: 77032786 MEDLINE  
 DOCUMENT NUMBER: PubMed ID: 979031  
 TITLE: [Special indications for the use of soft **contact** lenses as a drug-release-system (author's transl)].  
 Besondere Indikationen für die Anwendung weicher Kontaktlinsen als Augentropfenreservoir (Drug Release System).  
 AUTHOR: Bietti G B; De Caro G; Giraldi J P; Romani E  
 SOURCE: Klinische Monatsblätter für Augenheilkunde, (1976 Jan) 168 (1) 33-43.  
 Journal code: 0014133. ISSN: 0023-2165.  
 PUB. COUNTRY: GERMANY, WEST: Germany, Federal Republic of  
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
 LANGUAGE: German  
 FILE SEGMENT: Priority Journals  
 ENTRY MONTH: 197612  
 ENTRY DATE: Entered STN: 19900313  
 Last Updated on STN: 19980206  
 Entered Medline: 19761230

AB Research has been performed, both experimentally and clinically, to establish the value of the association of soft **contact** lenses and some types of eye drops. The use of soft **contact** lenses with eye drops may be useful in some special cases: a) more prolonged and more sustained effect compared with the usual way of administration of eye drops (especially antiglaucomatous substances, antimetabolites, mydriatics); b) possibility of reducing the concentration to avoid local discomfort or systemic side-effects, without loss of their effectiveness on the eye conditions to be treated. The combined use of soft lenses (12.5-15 mm in diameter) with eye drops may be obtained either by presoaking the lens in the liquid or by regular instillation of eye drops after insertion of the lens; the two techniques may of course be associated. In the present research the advantages of utilizing hydrophilic lenses with osmotically active substances, to obtain a better and more protracted dehydration of the cornea, were first examined, in vitro and in vivo. The following substances were tested: 10% propylenglycol, 10% glycerol, 10% glucose and 5% sodium chloride. The clearing effect of the different types of treatment was evaluated in 45 patients with edematous bullous **keratopathy** with an instrument which measured the infrared light emitted by an optic fiber and reflected by the cornea. The effects were more marked for the epithelial than for the stromal oedema. Another group of investigations was performed with two **polypeptides** with high molecular weight: Eledoisin, extracted from a mediterranean octopus, Eledone moschata, and Physalaemin, extracted from the skin of a south american batrachian, Physalaemus fuscomaculatus, both of these stimulate the lacrimal secretion and were previously successfully employed topically by the authors against

keratoconjunctivitis sicca. The increase of the amount of fluid was however short-lived. Eledoisin at a concentration of 200 mug/ml, was examined in its effects both in vitro and in vivo, whereas physalaemin, at a concentration of 20 mug/ml, only in vitro, owing to the present shortage of the product. The clinical tests in 23 eyes of 14 patients with keratoconjunctivitis sicca proved satisfactory, since the lacrymal stimulating effect is not only greater, but lasts three times longer by combining the instillation of eledoisin with a presoaked soft lens. Some antiglaucomatous products (propranolol, clonidine, prostigmine) were, finally, used in association with a soft lens to reduce the concentration of the eye drops for a better tolerance locally (propranolol: a beta-adrenergic blocking agent) or generally (clonidine: alpha-adrenergic agent), also with the advantage of protracted release. With propranolol the concentration could be reduced to 0.01-0.10% (instead of 0.125 to 0.25%) and to 1.5% (instead of 3%) with prostigmine, when lenses were presoaked or instillations took place at regular time intervals, after insertion of the lenses.

L14 ANSWER 16 OF 16 MEDLINE on STN  
ACCESSION NUMBER: 76127534 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 1250692  
TITLE: Preferential protection of the minor groove of non-operator DNA by lac repressor against methylation by dimethyl sulphate.  
AUTHOR: Kolchinsky A M; Mirzabekov A D; Gilbert W; Li L  
SOURCE: Nucleic acids research, (1976 Jan) 3 (1) 11-8.  
Journal code: 0411011. ISSN: 0305-1048.  
PUB. COUNTRY: ENGLAND: United Kingdom  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 197604  
ENTRY DATE: Entered STN: 19900313  
Last Updated on STN: 19900313  
Entered Medline: 19760430  
AB The binding of lactose repressor to non-operator DNA was studied by the modification of several DNA's, including glycosylated DNA, with dimethyl sulphate, which affects the minor and major grooves of DNA and single stranded DNA regions. The non-specific binding of the repressor to DNA protected the minor groove but apparently not the major groove of the DNA double helix against methylation and did not increase the content of single stranded DNA regions. This suggests that the repressor on binding to non-operator DNA makes **contacts** mainly in the minor groove of DNA and does not uncoil the DNA double helix. This is different from the interaction of the repressor with lactose operator DNA which occurs, as shown by Gilbert et al. (1), along both the major and the minor groove.

Weddington 10/031,339

04/10/2005

=&gt; d ibib abs hitstr l3 1-1

L3 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2005 ACS on STN  
ACCESSION NUMBER: 2001:833256 HCAPLUS  
DOCUMENT NUMBER: 135:369161  
TITLE: Compounds and methods for regulating bacterial growth and pathogenesis  
INVENTOR(S): Bassler, Bonnie L.; Dammel, Carol S.; Schauder, Stephan; Shokat, Kevan; Stein, Jeffrey; Surette, Michael G.  
PATENT ASSIGNEE(S): Princeton University, USA; Quorex Pharmaceuticals, Inc.; University Technologies International, Inc.  
SOURCE: PCT Int. Appl., 134 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001085664	A2	20011115	WO 2001-US15221	20010510
WO 2001085664	A3	20020808		
WO 2001085664	C1	20031120		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
AU 2001059734	A5	20011120	AU 2001-59734	20010510
EP 1282415	A2	20030212	EP 2001-933298	20010510
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
US 6559176	B1	20030506	US 2001-853832	20010510
JP 2003532698	T2	20031105	JP 2001-582266	20010510
US 2004097402	A1	20040520	US 2002-300818	20021119
US 6780890	B2	20040824		
US 2004180829	A1	20040916	US 2004-802425	20040317
PRIORITY APPLN. INFO.:			US 2000-203000P	P 20000510
			US 2000-254398P	P 20001207
			US 2000-202999P	P 20000510
			US 2001-853832	A3 20010510
			WO 2001-US15221	W 20010510
			US 2002-300818	A1 20021119

OTHER SOURCE(S): MARPAT 135:369161

AB The invention provides autoinducer-2 analogs that regulate the activity of autoinducer-2 and methods of using such analogs for regulating bacterial growth and pathogenesis.

IT 50-99-7, D-Glucose, biological studies 69-53-4, Ampicillin 127-69-5, Sulfisoxazole 488-10-8, cis-Jasmone 488-86-8, Croconic acid 527-50-4, L-threo-2-Pentulose 2758-18-1, 3-Methyl-2-cyclopenten-1-one 3658-77-3, 3(2H)-Furanone, 4-hydroxy-2,5-dimethyl-4077-47-8 5694-72-4 13436-46-9, 2-Ethoxytetrahydrofuran 18766-96-6, 3-Acetoxycyclopent-2-en-1-

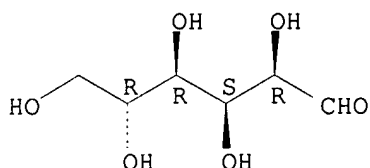
one 18871-14-2 19322-27-1 25564-22-1,  
 2-Pentyl-2-cyclopenten-1-one 26494-13-3 27538-10-9,  
 3(2H)-Furanone, 2-ethyl-4-hydroxy-5-methyl- 27538-11-0  
 29119-49-1 33673-62-0 35205-76-6  
 50632-57-0, 3(2H)-Furanone, 2-methoxy-2,4-diphenyl-  
 54458-61-6, 2,3,4,5-Tetramethyl-2-cyclopentenone  
 59995-48-1 60047-17-8 68043-00-5  
 80436-90-4, 2-Cyclopenten-1-one, 2-acetyl- 85721-33-1,  
 Ciprofloxacin 95962-14-4 200010-29-3  
 200010-31-7 204514-85-2 373380-18-8  
 373380-19-9 373380-20-2 373380-21-3  
 373380-22-4 373380-23-5

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
 (comps. and methods for regulating bacterial growth and pathogenesis)

RN 50-99-7 HCAPLUS

CN D-Glucose (8CI, 9CI) (CA INDEX NAME)

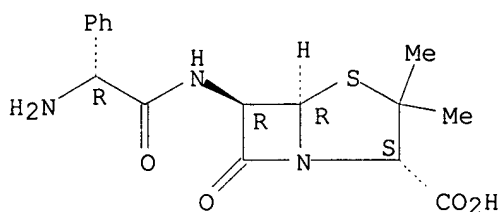
Absolute stereochemistry.



RN 69-53-4 HCAPLUS

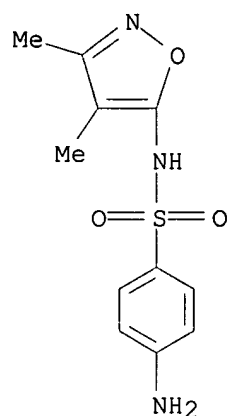
CN 4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid, 6-[[ (2R)-aminophenylacetyl]amino]-3,3-dimethyl-7-oxo-, (2S,5R,6R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 127-69-5 HCAPLUS

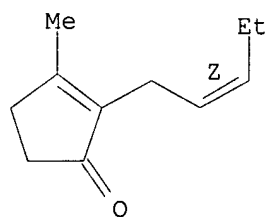
CN Benzenesulfonamide, 4-amino-N-(3,4-dimethyl-5-isoxazolyl)- (9CI) (CA INDEX NAME)



RN 488-10-8 HCAPLUS

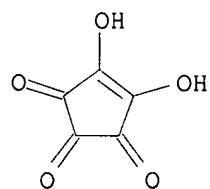
CN 2-Cyclopenten-1-one, 3-methyl-2-(2Z)-2-pentenyl- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 488-86-8 HCAPLUS

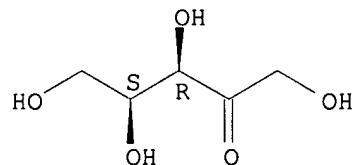
CN 4-Cyclopentene-1,2,3-trione, 4,5-dihydroxy- (7CI, 8CI, 9CI) (CA INDEX NAME)



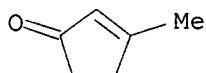
RN 527-50-4 HCAPLUS

CN L-threo-2-Pentulose (9CI) (CA INDEX NAME)

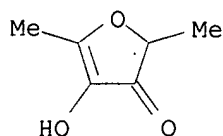
Absolute stereochemistry.



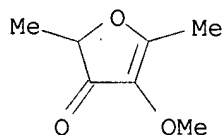
RN 2758-18-1 HCAPLUS  
CN 2-Cyclopenten-1-one, 3-methyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



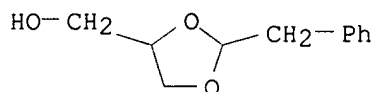
RN 3658-77-3 HCAPLUS  
CN 3(2H)-Furanone, 4-hydroxy-2,5-dimethyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



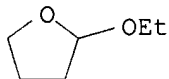
RN 4077-47-8 HCAPLUS  
CN 3(2H)-Furanone, 4-methoxy-2,5-dimethyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



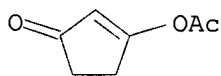
RN 5694-72-4 HCAPLUS  
CN 1,3-Dioxolane-4-methanol, 2-(phenylmethyl)- (9CI) (CA INDEX NAME)



RN 13436-46-9 HCAPLUS  
CN Furan, 2-ethoxytetrahydro- (7CI, 8CI, 9CI) (CA INDEX NAME)

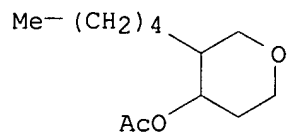


RN 18766-96-6 HCAPLUS  
CN 2-Cyclopenten-1-one, 3-(acetyloxy)- (9CI) (CA INDEX NAME)



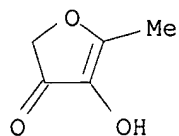
RN 18871-14-2 HCAPLUS  
CN 2H-Pyran-4-ol, tetrahydro-3-pentyl-, acetate (8CI, 9CI) (CA INDEX NAME)





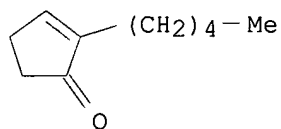
RN 19322-27-1 HCAPLUS

CN 3(2H)-Furanone, 4-hydroxy-5-methyl- (8CI, 9CI) (CA INDEX NAME)



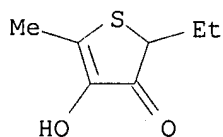
RN 25564-22-1 HCAPLUS

CN 2-Cyclopenten-1-one, 2-pentyl- (6CI, 8CI, 9CI) (CA INDEX NAME)



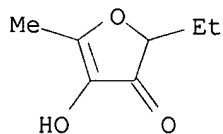
RN 26494-13-3 HCAPLUS

CN 3(2H)-Thiophenone, 2-ethyl-4-hydroxy-5-methyl- (8CI, 9CI) (CA INDEX NAME)



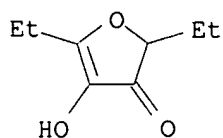
RN 27538-10-9 HCAPLUS

CN 3(2H)-Furanone, 2-ethyl-4-hydroxy-5-methyl- (8CI, 9CI) (CA INDEX NAME)

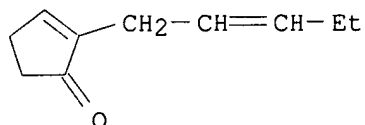


RN 27538-11-0 HCAPLUS

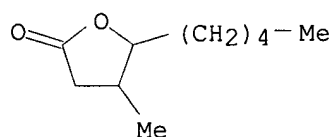
CN 3(2H)-Furanone, 2,5-diethyl-4-hydroxy- (8CI, 9CI) (CA INDEX NAME)



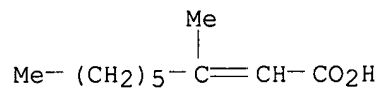
RN 29119-49-1 HCAPLUS  
 CN 2-Cyclopenten-1-one, 2-(2-pentenyl)- (8CI, 9CI) (CA INDEX NAME)



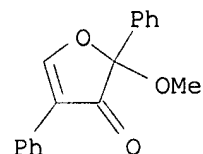
RN 33673-62-0 HCAPLUS  
 CN 2(3H)-Furanone, dihydro-4-methyl-5-pentyl- (8CI, 9CI) (CA INDEX NAME)



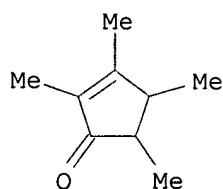
RN 35205-76-6 HCAPLUS  
 CN 2-Nonenoic acid, 3-methyl- (7CI, 9CI) (CA INDEX NAME)



RN 50632-57-0 HCAPLUS  
 CN 3(2H)-Furanone, 2-methoxy-2,4-diphenyl- (9CI) (CA INDEX NAME)

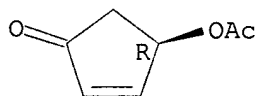


RN 54458-61-6 HCAPLUS  
 CN 2-Cyclopenten-1-one, 2,3,4,5-tetramethyl- (6CI, 7CI, 9CI) (CA INDEX NAME)

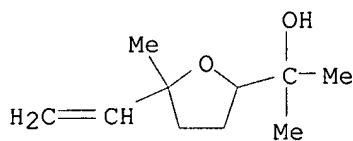


RN 59995-48-1 HCAPLUS  
 CN 2-Cyclopenten-1-one, 4-(acetyloxy)-, (4R)- (9CI) (CA INDEX NAME)

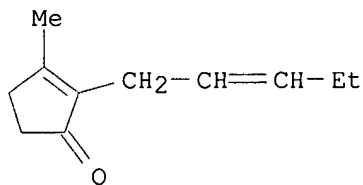
Absolute stereochemistry. Rotation (+).



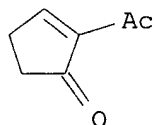
RN 60047-17-8 HCAPLUS  
 CN 2-Furanmethanol, 5-ethenyltetrahydro-α,α,5-trimethyl- (9CI)  
 (CA INDEX NAME)



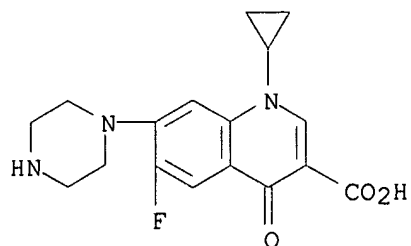
RN 68043-00-5 HCAPLUS  
 CN 2-Cyclopenten-1-one, 3-methyl-2-(2-pentenyl)- (7CI, 9CI) (CA INDEX NAME)



RN 80436-90-4 HCAPLUS  
 CN 2-Cyclopenten-1-one, 2-acetyl- (9CI) (CA INDEX NAME)

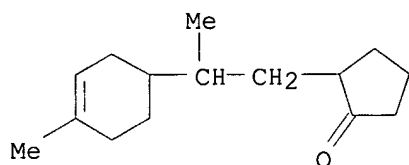


RN 85721-33-1 HCAPLUS  
 CN 3-Quinolinecarboxylic acid, 1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo-7-(1-piperazinyl)- (9CI) (CA INDEX NAME)



RN 95962-14-4 HCAPLUS

CN Cyclopentanone, 2-[2-(4-methyl-3-cyclohexen-1-yl)propyl]- (9CI) (CA INDEX NAME)

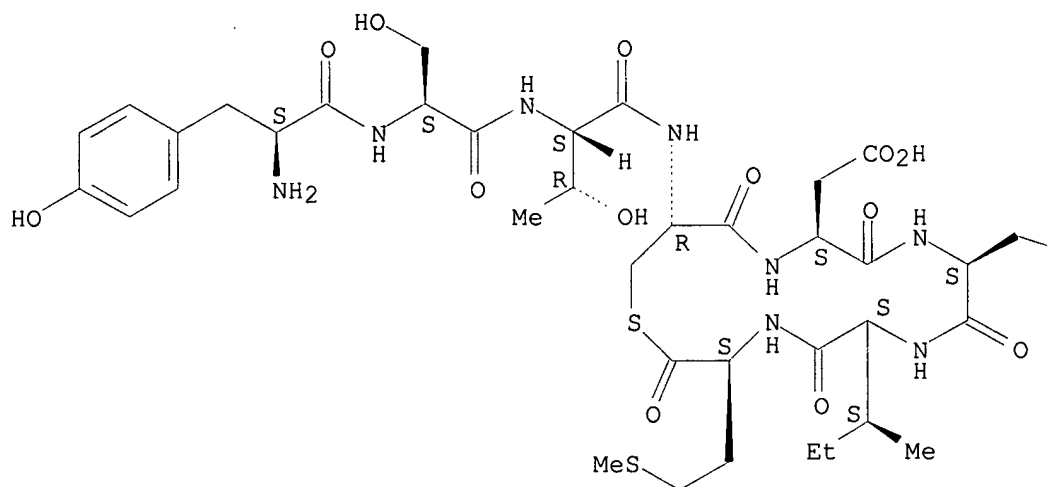


RN 200010-29-3 HCAPLUS

CN L-Methionine, L-tyrosyl-L-seryl-L-threonyl-L-cysteinyl-L- $\alpha$ -aspartyl-L-phenylalanyl-L-isoleucyl-, (8 $\rightarrow$ 4)-thiolactone (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

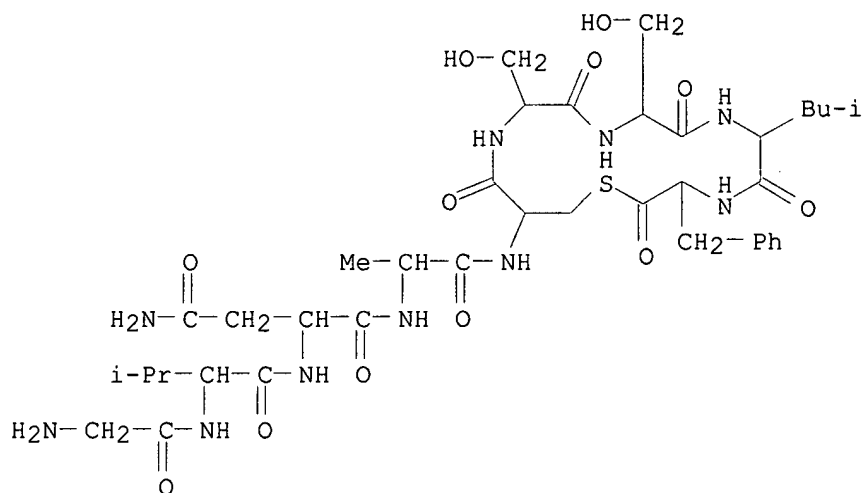


PAGE 1-B

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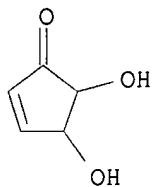
RN 200010-31-7 HCAPLUS

CN L-Phenylalanine, glycyl-L-valyl-L-asparaginyl-L-alanyl-L-cysteinyl-L-seryl-L-seryl-L-leucyl-, (9→5)-thiolactone (9CI) (CA INDEX NAME)



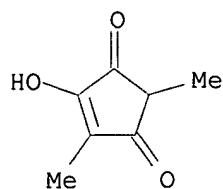
RN 204514-85-2 HCAPLUS

CN 2-Cyclopenten-1-one, 4,5-dihydroxy- (9CI) (CA INDEX NAME)

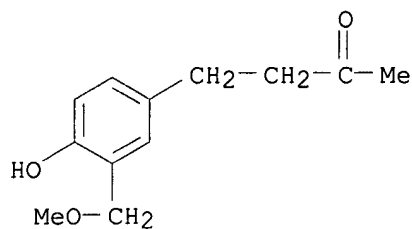


RN 373380-18-8 HCAPLUS

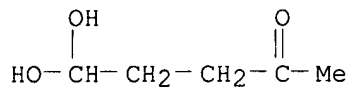
CN 4-Cyclopentene-1,3-dione, 4-hydroxy-2,5-dimethyl- (9CI) (CA INDEX NAME)



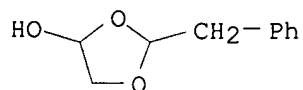
RN 373380-19-9 HCAPLUS  
 CN 2-Butanone, 4-[4-hydroxy-3-(methoxymethyl)phenyl]- (9CI) (CA INDEX NAME)



RN 373380-20-2 HCAPLUS  
 CN 2-Pentanone, 5,5-dihydroxy- (9CI) (CA INDEX NAME)

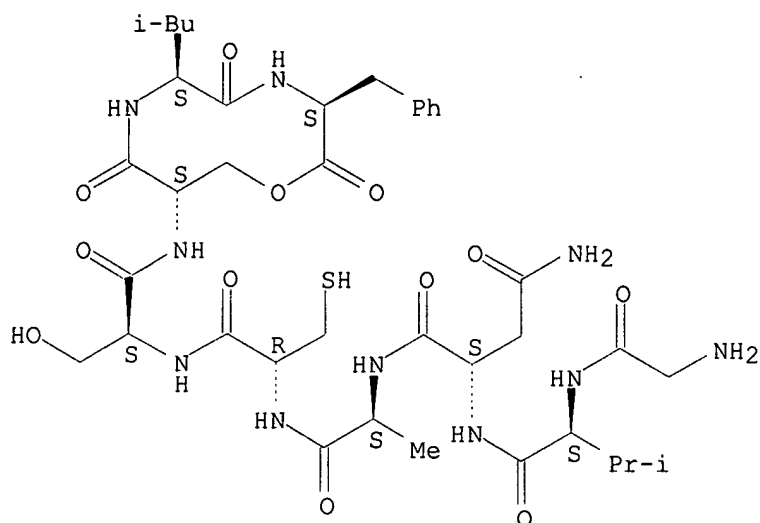


RN 373380-21-3 HCAPLUS  
 CN 1,3-Dioxolan-4-ol, 2-(phenylmethyl)- (9CI) (CA INDEX NAME)



RN 373380-22-4 HCAPLUS  
 CN L-Phenylalanine, glycyl-L-valyl-L-asparaginyl-L-alanyl-L-cysteinyl-L-seryl-L-seryl-L-leucyl-, (9->7)-lactone (9CI) (CA INDEX NAME)

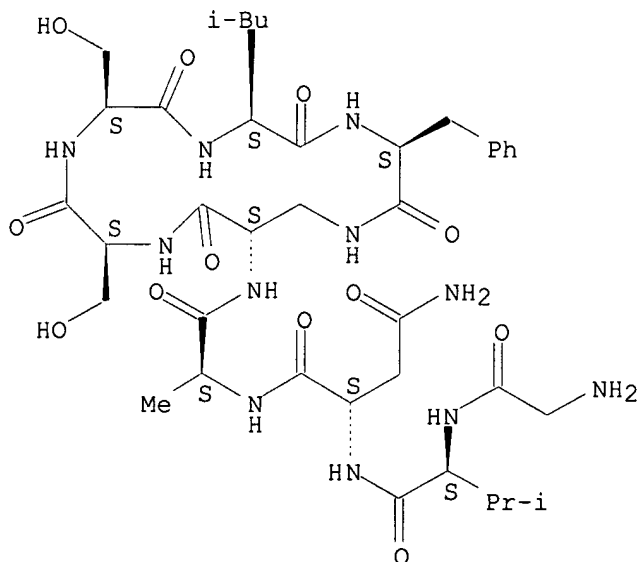
Absolute stereochemistry.



RN 373380-23-5 HCAPLUS

CN L-Phenylalanine, glycyl-L-valyl-L-asparaginyl-L-alanyl-3-amino-L-alanyl-L-seryl-L-seryl-L-leucyl-, (9→5)-lactam (9CI) (CA INDEX NAME)

Absolute stereochemistry.



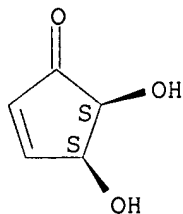
IT 374557-49-0

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative)  
(comps. and methods for regulating bacterial growth and pathogenesis)

RN 374557-49-0 HCAPLUS

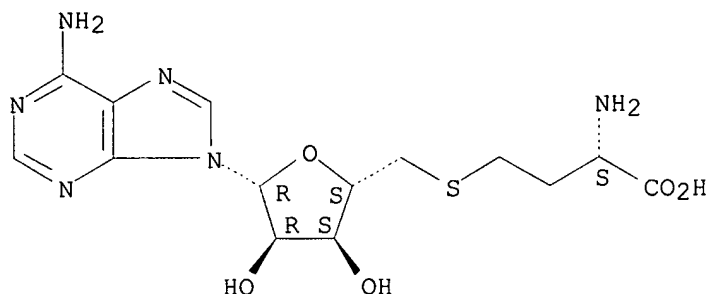
CN 2-Cyclopenten-1-one, 4,5-dihydroxy-, (4S,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



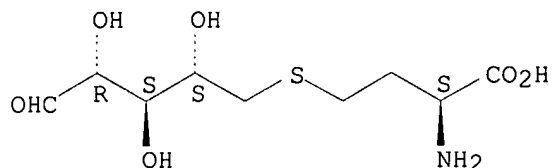
IT **979-92-0**, S-Adenosylhomocysteine  
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
 (compds. and methods for regulating bacterial growth and pathogenesis)  
 RN 979-92-0 HCAPLUS  
 CN L-Homocysteine, S-(5'-deoxyadenosin-5'-yl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT **15912-98-8**, S-Ribosylhomocysteine  
 RL: BPR (Biological process); BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative); PROC (Process)  
 (compds. and methods for regulating bacterial growth and pathogenesis)  
 RN 15912-98-8 HCAPLUS  
 CN L-Homocysteine, S-(5-deoxy-D-ribos-5-yl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT **273912-12-2 273912-13-3 273912-14-4**  
**273912-15-5 273912-16-6 273912-17-7**  
**273912-18-8 273912-19-9 374579-09-6**  
**374579-10-9 374579-11-0 374579-12-1**  
**374579-13-2**  
 RL: PRP (Properties)  
 (unclaimed sequence; compds. and methods for regulating bacterial growth and pathogenesis)  
 RN 273912-12-2 HCAPLUS  
 CN 18: PN: WO0032152 PAGE: 101 unclaimed DNA (9CI) (CA INDEX NAME)



\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 273912-13-3 HCAPLUS

CN 19: PN: WO0032152 PAGE: 101 unclaimed DNA (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 273912-14-4 HCAPLUS

CN 20: PN: WO0032152 PAGE: 126 unclaimed DNA (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 273912-15-5 HCAPLUS

CN 21: PN: WO0032152 PAGE: 126 unclaimed DNA (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 273912-16-6 HCAPLUS

CN 22: PN: WO0032152 PAGE: 127 unclaimed DNA (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 273912-17-7 HCAPLUS

CN 23: PN: WO0032152 PAGE: 127 unclaimed DNA (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 273912-18-8 HCAPLUS

CN 24: PN: WO0032152 PAGE: 127 unclaimed DNA (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 273912-19-9 HCAPLUS

CN 25: PN: WO0032152 PAGE: 127 unclaimed DNA (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 374579-09-6 HCAPLUS

CN 17: PN: WO0185664 FIGURE: 12 unclaimed sequence (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 374579-10-9 HCAPLUS

CN 18: PN: WO0185664 FIGURE: 12 unclaimed sequence (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 374579-11-0 HCAPLUS

CN 19: PN: WO0185664 FIGURE: 12 unclaimed sequence (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 374579-12-1 HCAPLUS

CN 20: PN: WO0185664 FIGURE: 12 unclaimed sequence (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 374579-13-2 HCAPLUS

CN 21: PN: WO0185664 FIGURE: 12 unclaimed sequence (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*